The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

TRUSTEES

OF THE

BOSTON STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30,

1939

THE NINETY-NINTH ANNUAL REPORT OF THE HOSPITAL
FOUNDED IN 1839 BY THE CITY OF BOSTON

PUBLICATION OF THIS DOCUMENT APPROVED BY THE COMMISSION ON ADMINISTRATION AND FINANCE
600-9-40-Req. P-127.

OCCUPATIONAL PRINTING PLANT
DEPARTMENT OF MENTAL HEALTH
GARDNER STATE HOSPITAL
EAST GARDNER, MASS.

BOSTON STATE HOSPITAL

(Post Office Address: Dorchester Center, Mass.)

Board of Trustees

Thomas D. Russo, *Acting Chairman*, Boston
Alexander M. Sullivan, Boston
Dr. Francis J. Callanan, Brookline
Joseph J. Cardillo, Somerville
Harry B. Berman, Newton
Mrs. Gertrude A. Macdonnell, *Secretary*, Boston
Miss Josephine E. Thurlow, R.N., Winchester

Consulting Physicians

Edward J. O'Brien, M.D., *Genito-urologist*
Boris E. Greenberg, M.D., *Genito-urologist*
Louis Curran, M.D., *Medical Consultant*
Hyman Morrison, M.D., *Medical Consultant*
Samuel Proger, M.D., *Medical Consultant*
John F. Casey, M.D., *Medical Consultant*
Donald Macdonald, M.D., *Laryngologist, Rhinologist, and Otologist*
Vincent J. DiMento, M.D., *Laryngologist, Rhinologist, and Otologist*
Victor Baer, M.D., *Laryngologist, Rhinologist, and Otologist*
Harold F. Downing, M.D., *Orthopedist*
Matthew V. Norton, M.D., *Orthopedist*
John S. Kelley, M.D., *Orthopedist*
William J. McDonald, M.D., *Gynecologist*
Fred J. Lynch, M.D., *Gynecologist*
J. Edward Flynn, M.D., *Surgical Consultant*
Lawrence J. Louis, M.D., *Surgical Consultant*
A. J. A. Campbell, M.D., *Surgical Consultant*
Arch. McK. Fraser, M.D., *Surgical Consultant*
Francis P. McCarthy, M.D., *Dermatologist*
Milton Glodt, M.D., *Dermatologist*
W. A. Noonan, M.D., *Anaesthesist*
Charles H. Thorner, *Podiatrist*
James E. Gibbons, D.M.D., *Dentist*
Hugh C. Donahue, M.D., *Ophthalmologist*
Abraham Myerson, M.D., *Neurologist*
Tracy Putnam, M.D., *Neurosurgeon*
H. L. McCarthy, M.D., *Roentgenologist*
D. Monroe, M.D., *Brain Surgeon*
John A. Foley, M.D., *Tuberculosis Consultant*

Chaplains

Rev. Robert Pierce
Rev. Frank H. Stedman
Rev. Moses L. Sedar
Rev. Charles J. Foley

Officers of the Hospital

Harold F. Norton, M.D., *Superintendent*
Purcell G. Schube, M.D., *Assistant Superintendent*
Ralph S. Banay, M.D., *Director of Clinical Psychiatry*
Theodore F. Lindberg, M.D., *Senior Physician*
Naomi Raskin (Pathologist) M.D., *Senior Physician*
N. Anthony Bicchieri, M.D., *Senior Physician*
Joseph P. Thornton, M.D., *Senior Physician*
Daniel J. Sullivan, M.D., *Senior Physician*
Norris B. Flanagan, M.D., *Senior Physician*
Louis S. Chase, M.D., *Senior Physician*
Peter P. Gudas, M.D., *Senior Physician*
John F. Sullivan, M.D., *Assistant Physician*
Ernst Schmidhofer, M.D., *Assistant Physician*
William J. Clauser, M.D., *Assistant Physician*
John M. Hill, M.D., *Assistant Physician*
Michael A. Grassi, M.D., *Assistant Physician* (L.O.A. Charles S. Mullin, Jr.)

_____, *Assistant Physician*
KAEN A. NOONAN, D.M.D., *Dentist*
CHARLES A. PERRY, *Steward*
ROSE J. SICILIANO, *Treasurer*
MARY ALICE MCMAHON, R.N., *Principal of School of Nursing*

TRUSTEES' REPORT

To His Excellency the Governor and the Honorable Council:

The Board of Trustees of the Boston State Hospital respectfully submit the Annual Report for the year 1939, and make the following recommendations:—

(*a*) A tunnel should be provided under Morton Street at as early a date as possible. The crossing of Morton Street by the patients is a constant hazard to them and a constant source of worry to the administration of the hospital. Tunnels should also be provided between the various buildings. These tunnels would be of tremendous help during the winter months and would prevent the exposure of the patients to bad weather conditions.

(*b*) There is no overcrowding of the institution and this is mainly due to the efficient administration and enthusiasm of the medical staff in returning patients to their homes. The C and D Buildings are not housing patients at the present time whereas they are equipped to house 356 patients. These buildings, however, should be repaired and placed in good condition in case it may be necessary to use them at any future date.

(*c*) The old electric wiring in the C, D, M, N, and R Buildings should be replaced without delay. This old wiring is a serious fire hazard. It has been responsible for a recent fire in one of these buildings.

(*d*) The overhead electric power lines came down during the hurricane with the result that the West Group was in darkness. It is possible that these lines may come down again in another violent storm.

(*e*) The brook, known as part of Stony Brook, is an eyesore, is unsanitary, and breeds mosquitoes. During the spring of the year when the waters are high, it is a dangerous hazard for the patients. Unpleasant odors also come from this brook. The brook should be covered.

(*f*) A large auditorium should be provided in the West Group for recreational activities. These recreational activities have been built up extensively in the past three years. The small auditorium in the East Group is entirely inadequate. Such a large auditorium would be a great boon to the hospital in providing recreational activities for a much larger number of patients.

The Board of Trustees is appreciative of the intensive and periodical supervision on the part of the Commissioner, Dr. Clifton T. Perkins, and his assistants.

During the year 1939, no destructive criticism of any kind has been directed against the administration of the hospital. On the other hand commendation has come from several responsible sources.

The relatives of the patients have constantly expressed their appreciation of the efforts made by all concerned to insure care and comfort for the patients.

Following is the detailed report of Dr. Harold F. Norton, Superintendent.

Respectfully submitted,

ALEXANDER M. SULLIVAN — THOMAS D. RUSSO
JOSEPHINE E. THURLOW — HARRY B. BERMAN
JOSEPH J. CARDILLO — GERTRUDE A. MACDONNELL

REPORT OF THE SUPERINTENDENT

To the Board of Trustees of the Boston State Hospital:

The following is a report of the activities of the hospital for the statistical year ending September 30, 1939, and the fiscal year ending November 30, 1939. Founded by the City of Boston in 1839, this marks the completion of its one hundredth year as a hospital for mental illness, and the thirty-first year of its history as a state institution.

MOVEMENT OF POPULATION

The census of the hospital on September 30, 1938, was as follows: in the wards, men, 1,045; women, 1,341; total, 2,386. There were admitted during the year 496 men and 579 women, a total of 1,075. There were discharged to the community 361 men and 393 women, a total of 754. Twelve men and 9 women were transferred to other institu-

tions. There were 302 deaths during the year, 130 men and 172 women. Thus, there were remaining on the books on September 30, 1939, 2,651 patients, of which number 2,322 were residing in the hospital.

Personnel

During the year the following changes were made in the staff of the hospital:

John Ficcicchy, M.D., left the service as Assistant Physician (Temporary) on February 26, 1939.

Owen C. Mullaney, M.D., who was granted a leave of absence, returned to duty on February 27, 1939, and left the service as Assistant Physician on July 31, 1939.

I. Paley Rubin, M.D., left the service as Senior Physician on April 15, 1939.

N. Anthony Bicchieri, M.D., was promoted to Senior Physician on April 16, 1939.

John R. Gately, M.D., was appointed Assistant Physician on June 1, 1939, and left the service on July 15, 1939.

John J. Slattery, M.D., left the service as Director of Clinical Psychiatry on June 21, 1939.

Nathaniel Showstack, M.D., was appointed Assistant Physician on July 20, 1939, and left the service on July 26, 1939.

Arthur W. Lyons, M.D., was appointed Assistant Physician on August 7, 1939, and left the service on September 30, 1939.

Dorothy E. Donley, M.D., left the service as Senior Physician on October 1, 1939.

Charles S. Mullin, Jr., M.D., Assistant Physician, was granted a leave of absence for one year beginning October 1, 1939.

Margaret R. Simpson, M.D., Senior Physician, transferred to Foxborough State Hospital on October 31, 1939.

Michael A. Grassi, M.D., was appointed Assistant Physician (Temporary) on October 2, 1939.

John M. Hill, M.D., was appointed Assistant Physician on October 2, 1939.

Louis S. Chase, M.D., was promoted from Assistant Physician to Senior Physician on October 2, 1939.

William J. Clauser, M.D., was appointed Assistant Physician on October 2, 1939.

Peter P. Gudas, M.D., was promoted from Assistant Physician to Senior Physician on October 25, 1939.

Ernst Schmidhofer, M.D., was appointed Assistant Physician on November 20, 1939.

Ralph S. Banay, M.D., was appointed Director of Clinical Psychiatry on November 15, 1939.

Neuro-psychiatric Service

This branch of the institution has made marked progress during the year. Stress is being laid in several directions, *i.e.*, the clinical study of the patient masses, clinical study of the individual patient, revaluation of each patient's problems from socio-economic, psychological, hereditary, environmental, and psychopathological points of view, with subsequent attempts to rehabilitate the patient by use of mass therapy and individual psychotherapy. These failing, more dynamic measures are utilized in the form of metrazol, insulin, narcosis, etc. Where indicated, other pharmaco-therapeutic measures are used, as in vitamin deficiency states, toxic states, and such. This intensive therapeutic campaign has resulted in the accumulation of valuable facts relative to the proper methods of treating patients individually and in groups. Although individual therapy is necessary in many instances, it must always be utilized with the full knowledge as to its limitations and that from a practical and economic point of view, a type of therapy must be incorporated into our armamentarium, which treats not the isolated patient but rather the total patient population. It is this latter procedure, *i.e.*, mass therapy, which has been provocative of the rather startling results which have been obtained in this institution in the past three and one-half years. This mass therapeutic program has taken the facilities of the hospital and molded them into a vast machine wherein the sole object is the rehabilitation of the entire patient population — the getting of as many of them well as is possible and the returning of them to their respective communities as soon as possible. In this program, no patient is forgotten — no patient is neglected — and all have equal chances for treatment in this respect. Those who can do so, recover with a rapidity which is dependent only upon their individual resources.

Staff meetings have been held regularly during the year. The Psychopathological meetings are held four times each week — Monday, Tuesday, Wednesday, and Satur-

day, from 11.00 A.M. to 12.30 P.M. Each Thursday from 11.00 A.M. to 12.30 P.M. a Clinical-Pathological Conference is held in the pathological laboratory. Each Thursday and Friday morning from 9.00 to 10.00 A.M., a Therapeutic Staff Meeting is held. Every Friday from 11.00 A.M. to 12.00 noon, Neurological Rounds are conducted by Dr. L. Alexander. On Tuesday mornings from 9.00 A.M. to 10.00 A.M., Dr. H. McCarthy conducts a roentgenological conference. Every Thursday Dr. W. Damesheck conducts medical ward rounds. Every Tuesday and Friday morning a Luetic Clinic is held. Each Wednesday at noon a Staff Luncheon is held, at which time a prominent physician, not associated with the hospital, speaks. Every other Wednesday evening at 6.00 P.M. the Medical Journal Club meets, and at that time one member of the staff presents in concise form the important material from journals assigned to him.

In this manner a progressive effort is being made to develop a high level of interest in neuropsychiatry in this institution and in the neuropsychiatric advances made throughout the world. In line with this, two men were sent to the neuropsychiatric refresher course offered by the Department of Mental Health.

The consolidation of all of the medical and surgical problems into one unit (tuberculosis being excepted) has resulted in a much more efficient handling of these problems. Three and one-half years ago there were an average daily population of bed patients of 275+. Last year that average had dropped to 81.16. The reasons for this are several: 1. When all of the physically ill patients are consolidated in one unit their treatment is more efficient, more thorough, and the resulting rapidity of physical recovery correspondingly greater. 2. Patients becoming ill are so diagnosed earlier and upon being transferred to the Infirmary Service receive earlier intensive care, thereby shortening the length of illness. 3. Individuals who are bed patients and others who are potentially so receive an excellent dietary, high in all nutritional requisites, thereby making them less prone to become so physically debilitated as to necessitate prolonged bed care. 4. Patients who are feeble but are capable of safely exercising, are given careful calisthenics, whereby their physical stamina and resistance to disease is increased.

Those medical and surgical problems which do exist are immediately cared for by the Infirmary Staff, and when necessary by a highly competent group of consultants. Whenever there is the slightest question of what constitutes proper medical or surgical care, a consultant is requested and his advice followed.

The tuberculosis patients are cared for in a unit especially provided for this problem, the O Building. In this unit, particular attention is paid to the problem of tuberculosis and to the best methods of handling it. As a result of this intensified study, these patients make recoveries from their tuberculosis, and are able to be returned to their respective services for specific psychiatric therapy.

On the Infirmary Service, during the year, in addition to ordinary routine medical and surgical work, 97 surgical operations were performed.

Dental Service

The dental activities at the hospital have been conducted under the direction of Dr. Kaen A. Noonan. The dental problems are extremely varied but nevertheless are being adequately handled. Each patient in the hospital has a tooth brush and by means of drills has been taught to care properly for his teeth. In addition, where patients are unable to do this, the teeth are regularly cared for by the nursing service and by a dental hygienist. This latter individual also conducts a program of prophylaxis which has been quite successful in decreasing oral infections and in keeping scale at a minimum. Supervising the entire program is the dentist, who works from his central office. In this office he handles all of the dental work requiring his personal attention.

During the year the following work was performed:

Examinations	5,882	Fillings	473
Prophylaxis	3,653	Treatments	259
Extractions	1,228	Restorations	74

Psychological Service

This department, which formerly consisted of one psychometrist for many years, now is comprised of two individuals, both psychometrists. Although, for the proper functioning of this department, there should be, in addition, a psychologist, this position has not been able as yet to be obtained. In spite of this lack, two students from Harvard Medical School have received some practical experience by actual testing of patients. It is

very probable that this number of students will be increased in future years. In addition to regular testing, material on several problems is being collected in this department, *i.e.*, personality studies of alcoholic patients, personality studies of suicidal patients, personality studies on involutional patients, personality studies on juvenile delinquents, long range changes in the I.Q. of problem school children, comparison of the Stanford Binet I.Q. and Bellevue Intelligence Test. These studies are conducted and controlled by Dr. P. G. Schube. The statistics of the routine work done by this Department are as follows:

1. Hospital Patients:

Number of patients seen	534
Tests given	
Binet tests	353
Bellevue tests	
Verbal	108
Performance	77
Bernreuters	138
Bells	175
Mare and Foal Test	35
Knox Cube Imitation	24
Porteus Mazes	41
Seguin-Goddard Formboard	37
Healy Pictorial Completion	64
Otis Intelligence Test	1
Army Alpha	2
Army Beta	2
L. V.	8
Total number of tests given	1,065

2. Delinquents (Juvenile):

Number of delinquents tested	139
Tests given	
Stanford Binets	137
Bernreuters	21
Bells	19
Bellevues	
Verbal	5
Performances	4
Healy Pictorial Completion	2
Sequin Goddard Formboard	1
Mare and Foal Test	1
Total number of tests given	190

3. School Clinic:

Number of children tested	417

(*a*) Somerville District, 256 (*b*) Everett District, 161

Each of these children received a Stanford Binet Intelligence Test, a physical examination, a short psychiatric examination, and school tests. On many of them special Social Service investigations were carried out.

Social Service Department

The Social Service Department was established in this hospital on July 1, 1913, with the engagement of one social worker, "who, in close co-operation with the physicians, searched out the varied needs of the patients and their families, and seeks to furnish help in ways as various as the situations which demand it." During the first year, 271 cases were referred and 922 visits made. In the subsequent 26 years, this department has increased until it consists of five workers. It is now under the supervision of Mrs. Lillian S. Irvine, Head Social Worker. The only vacancy occurring during the year was filled by the appointment of Miss Margaret Kelly, a graduate of Pembroke College, as Assistant Psychiatric Social Worker. During the year 1939, 1,857 new cases were referred to the Department, an increase of 703 over the previous year.

The work of the Social Service Department consists largely of obtaining histories and making full investigations, making investigations for trial visit, discharge or family care, and supervision of patients on trial visit. The Social Service worker interviews the relatives of newly admitted patients to obtain a medical and social history and to obtain as complete a history as possible of the patient's early life, his heredity, and his environment, particular emphasis being placed on his previous personality and the onset and symptoms of his psychosis. The worker inquires about his financial status, and plans for his leaving the hospital when he is ready to do so. In 1914, this department obtained 35 histories; during the present year, it obtained 1,101.

When a patient has been admitted to this hospital for observation, or when he is a court case, the worker makes a full investigation and sees others besides the relatives. She goes out into the community to interview the school teacher, to obtain the school record, to secure work reports from employers, health history from the family physician and other hospitals, and the store of the patient's behavior from other relatives and friends. These histories and investigations are of primary importance to the psychiatrist in determining methods of treatment, and to both the psychiatrist and the social worker in making plans for the patient. The workers obtained an average of 3 histories a day for every day in the year.

While the patient is in the hospital, the social worker gives him personal service—calls his relatives, locates his clothing, stores his furniture, and visits him on the ward. When he is ready to leave the hospital, she makes a pre-visit investigation; she interviews his relatives, and if he cannot go to his own home, she tries to make plans for him—a convalescent home, a job, welfare, or old age assistance. He may be able to take care of himself with only a little help, or he may require close supervision. During the year, this department placed one man who had been a patient in the hospital for 50 years and one woman who had been a patient for 35 years, and applied for old age assistance for both of these patients. The man has a room in Boston but visits the hospital every day. The woman was somewhat skeptical about leaving the hospital, but when she was placed in a convalescent home with two former patients whom she had known in the hospital, she seemed quite contented.

One of the most difficult and at the same time the most fascinating duties of the Social Service is that of locating relatives. This is necessary, particularly when patients are on the Danger List or when plans are being made for their release to the community. It requires much effort and time to locate relatives or interested friends of a patient who has been in the hospital for many years and has had no visitors, but it is quite often possible to do so.

During the year, this department has had three voluntary social workers part time. Two of these were graduates of Emmanuel College and one was a graduate of Smith College School of Social Work. The latter was particularly interested in school clinic cases and obtained 175 histories in connection with the work of the clinic. Miss Leona Macdonnell also worked with the Department for three months during her summer vacation from Regis College. With the assistance of these workers, the Department obtained 1,101 histories and made 153 full investigations.

The following is a summary of Social Service cases for the year:

	Male	*Female*	*Total*
New Cases	948	909	1,857
Renewed Cases from Previous Years	186	218	404
Renewed Cases within the Year	111	166	277
Continued Cases from Previous Year	333	368	701
Closed during Year	1,129	1,241	2,370
Cases Continued to Following Year	449	420	869

Physical Therapy Department

Prior to August 30, 1939, this department had functioned in conjunction with the X-Ray Department, the work of both units being performed by one individual who was listed as a Physiotherapist. The allocation of the position of X-Ray Technician was requested and approved, making it possible to employ a full time Physiotherapist. On August 28, 1939, Miss Rosalind M. Gibbs was employed in this capacity. She is a graduate of the Sargent School of Boston University.

From August 30, 1939, through September 30, 1939, which is the total period of active operation of this department, for the statistical year 1939, the following illnesses were treated:

Acne	2	Muscular weakness and dystrophy	1
Amputation	1	Neuritis	3
Anemia and Debility	1	Pustules	1
Catatonic with postural defects	2	Radial paralysis	1
Contracted hand	3	Sacro-iliac	1
Dermatitis	1	Strain	1
Epidermophytosis	2	Traumatic knee	1
Fractures	8	Tubercular sinuses	1
Hemiplegia	3		
Total	33		

For this same period the following types of treatment were prescribed:

Type of Treatment	*No. of Treatments*	*Type of Treatment*	*No. of Treatments*
Autoconsdensation	6	Cacillatory wave	6
Exercise and muscle re-education	67	Saturation	15
Galvanism	8	Sinusoidal	30
Infra-red	92	Ultra violet	77
Massage	82		
Total	383		

X-Ray Department

At the beginning of the year, the X-Ray Department was under the supervision of Mrs. Gertrude Moses. On July 28, 1939, she left the service of the hospital and on the same day her work was carried on by Mrs. Margaret Morrison. On September 16, 1939, she left the service, and on September 18, 1939, the position of X-Ray Technician having been created for this institution, Miss M. Claire Gagen was employed in this capacity.

The work of the X-Ray Department has consisted of X-Ray or fluoroscopic examinations of such patients and employees as are ordered by the staff physicians. The X-Ray plates are read once a week by Dr. H. J. McCarthy, consulting roentgenologist. In addition to X-Ray plates for suspected pathology, all employees working in direct contact with food or with patients having tuberculosis, are X-Rayed at regular intervals.

During the year there were:

X-Rays taken	2,270	Patients X-Rayed	1,534
Fluoroscopic Examinations	19	Employees X-Rayed	439

Occupational Therapy Department

During this year several changes in the locations of Occupational Therapy shops have been made. The work in the A and B Buildings was discontinued on the wards and the small offices and shops closed. In the place of these arrangements, one large shop was opened on the third floor of the H Building and the patients from the A and B Buildings were sent to classes there. The shop for male patients in the J Building and the Weaving Shop in the H basement were also discontinued and the work centered in the big shop in the H Building. The female patients from A, B, G, and K Buildings and the male patients from B, G, H, I, and J Buildings attended classes in this large shop. The H-9 Occupational Therapy Shop is a large and attractive room and can accommodate 175 to 200 patients.

The shops in the L, P, and Q Buildings were also discontinued and one large shop was opened on the first floor of the East Patients' Cafeteria Building. This shop has two large rooms with a small entry-way for a library and the desk of the Physical Education worker. Patients from all of the buildings in the East Group (O Building excepted) attend classes twice a week. Gymnasium classes were organized and held in the East Chapel Auditorium instead of the East P Basement. The patients from each of the buildings attend classes twice a week.

Patients in O Building are visited once a week, the worker giving out books and magazines and organizing quiet games, such as cards, checkers, etc., among the patients.

The Art Classes formerly held in the Reception Building were also moved to the H-9 Occupational Therapy Shop. The small shop for the K patients was opened in that building and the sole work of this group has been the making of curtains for the various wards. The Furniture Painting and Refinishing Shop was moved from the H basement to the second floor of the West Centre Building, offering a lighter and better ventilated shop.

Shops in operation at the end of the year after changes were made are as follows:
Reception Building Basement—Female Reception Building patients.
K Building Curtain Shop—K patients.
H-9 Occupational Therapy Shop—A, B, and G female patients.
H-9 Occupational Therapy Shop—B, E, F, G, H, I, J male patients.
Furniture Painting and Refinishing Shop—G, H, I, J patients.
Art Classes—Male and female patients from West Group (H-9 Occupational Shop).
Gymnasium Classes, East Group Chapel Auditorium—All East Group patients with the exception of O Building.
East Occupational Therapy Shop—L, M, N, P, Q, R, S patients. Also working on respective wards.

The Boston State Hospital News, a monthly newspaper, was revived and seven numbers were issued during the year.

The Physical Education worker in the Occupational Therapy Department has attended the various recreational activities such as concerts, choral groups, etc., during the year, with the entire department on duty at the hospital dances, Field Days, and the large affairs. During the summer months, all work, with the exception of one small group, was held out of doors, with games and other recreational activities receiving the emphasis.

During the year 24,735 garments were mended; 15,723 pieces of patients' clothing marked; 1,461 key cords were made for the use of employees, and 3,862 miscellaneous articles made. 5,399 pieces of furniture were painted, refinished, and sent to the wards.

Following is a summary report of classes and attendance for the year:

Number of classes	3,946
Total hours	11,234
Total attendance	92,366
Total different patients: in classes	15,079
Total different patients: at recreation	7,210
Total patients in: industrial placement	802

Pathological Laboratory

During the year the pathological laboratory has continued under the supervision of Dr. Naomi Raskin. She has working under her two technicians and these, from the point of view of the amount of work demanded and necessary for the efficient function of this department, are certainly inadequate in number. In spite of the undermanning of this very important part of the institution, the following work has been completed:

Autopsies	129
Bacterial slide examinations	530
Blood Counts:	
White	1,437
Red	1,455
Hemoglobin estimations	1,455
Differential	1,437
Blood sugars	100
Urinalysis	2,285
Non-protein nitrogen	57
Blood cultures	9
Stool examinations	50
Reticulocyte count	26
Cholesterols	4
Calcium	3
Bromides	5
Bleeding and clotting time	3
Gastric content examinations	5
Phenolsulphathalein tests	2
Sedimentation rate	3
Icteric indices	6
Milk Analysis:	
Cultures	22
Smears	14
Guinea pig inoculations	13
Van Der Bergh	1
Spinal fluids	441
Sputums	226
Tissue work:	
Frozen sections	510
Celloiden sections	933
Paraffin sections	5,737
Blood grouping and matching	15

Electrocardiographic Department

For the first six months of this year, this department was supervised by Miss Ruth Johnson. Subsequent to her leaving the department, her work was assumed by Dr. N. Anthony Bicchieri. Electrocardiographic tracings are done upon staff request on any patients needing them. The file of tracings is forming a very valuable collection of electrical conductivity phenomena of the hearts of the patients at this institution. They number now well over one thousand and range from simple normal tracings through the entire gamut of cardiac pathology obtainable by the electrocardiograph.

Engineering Department

This department has continued to function under the supervision of Mr. Thomas J. Henry, Chief Power Plant Engineer.

During the year the following improvements and installation of apparatus, etc., were made:

1. New muffler furnace in the laboratory.
2. Four radiators in West B Building.
3. New steam and return lines for new hot water tank in laundry.
4. New cafeteria in East Patients' dining room.
5. New water supply line in West F Building.
6. Two new radiators in West A Building.
7. Complete installation of new hot water tank in laundry.
8. New hot water heater in Canterbury Street farmhouse.
9. Two new radiators in West H Building.
10. New wash bowls in West I Building.
11. New toilets and sink in the East Occupational Shop.
12. New throttles in No. 3 pulverizer turbine and No. 2 heater pump.
13. Potato peeling machine in basement of East Chapel Building.
14. Poles for high tension wires and wires changed over from old poles.
15. Expansion joints in exhaust lines of all three turbo generators in powerhouse.
16. Five-inch auxiliary steam main over the boilers.
17. Elevator in Reception Building overhauled.
18. Soil line for lavatory in Recreation Field.
19. Five-inch elbow in heating main West I Building.
20. High tension underground cable between East L and East S Buildings.
21. Toilets in new field house on Recreation Field.
22. Replacement transformers in West Kitchen with new 25 KVA transformer and installed proper vent.
23. Washer in laundry.
24. Replacement of coils in water heating tanks of East and West Kitchens.
25. Showers in East O Building.
26. Showers in West B Building.
27. Laundry tray in West K Building.
28. Waste and water line for dental chairs in Reception Building.
29. Employees' cafeteria in East Employees' Dining Room.
30. Twenty street lights in West Group and connected with an automatic time clock.
31. Brake on extractor in laundry.
32. New friction clutch on the Troy dry tumbler.
33. Three thousand feet new high tension wire on pole lines.
34. Cafeteria in West A Building Patients' Dining Room.
35. Underground high tension cable, cutouts, and lightning arrestors put in for the Reception Building.
36. Powers thermostatic heating control in Superintendent's Home.
37. Group shower in West H Building.
38. Heating boiler and heating system connection at Assistant Superintendent's Home.
39. Flood lights in East Group near greenhouse.
40. Steam chest and governor valve put in the No. 2 pulverizer turbine.
41. Doughnut machine in West Kitchen.
42. Sinks in West Kitchen basement.
43. Blow-off line put in on all boilers in the powerhouse.
44. Frigidaire units in East Kitchen and bakery to replace old brine system in food boxes.
45. Rough piping in Assistant Superintendent's Home.

The usual maintenance work was also carried out. The boilers in the powerhouse were thoroughly cleaned and inspected by the State Inspector. The pulverizers were repaired and parts replaced as necessary. Pumps were overhauled and cleaned and the oil replaced from time to time. Main turbines were cleaned and packing replaced as necessary. Ice machine was repacked and the condensors were cleaned and made ready for winter and summer.

The power plant oil and coal consumption, water consumption, and electricity produced is as follows:

Oil consumed	7,496,746 pounds
Coal consumed	15,808,600 pounds
Water evaporated	310,684,290 pounds
Electricity produced	1,122,200 K.W.H.

Hydrotherapy Department

The Hydrotherapy Department this year has been placed under the direct supervision of the nursing service and has been able, as a result of this change, to function more efficiently in the hydrotherapeutic treatment of the patient and in the training of the nursing personnel in the methods and value of properly regulated hydrotherapy. The department itself is immediately supervised by Miss Mary A. Bresnahan, R.N.

During the year Miss Bresnahan gave a course of eight lectures to the Attendant Nurses.

The following courses of lectures were given by Dr. Rebekah Wright, Hydrotherapist for the Department of Mental Health:

Nine lectures, with demonstrations, to Physicians.

Three lectures, with demonstrations, to Hydrotherapists.

Fourteen lectures, with demonstrations, to Head Nurses and Supervisors.

Six lectures, with demonstrations, to Attendant Nurses.

Six lectures, with demonstrations, to Harvard University Group of students of Physiotherapy.

There were 38 employees who received 119 pack lessons, a total of 410 hours.

The number of patients given tonic treatments was 68 and the number of treatments given was 4,392.

The number of patients in wet sheet packs, 270. The number of packs, 11,625, and the number of hours of packs, 37,193.23.

The number of patients in continuous baths, 329. The number of baths, 8,585, and the number of hours, 67,622.18.

Nursing Service

This service has continued to function under the guidance of Miss Mary Alice McMahon, R.N., Principal of the School of Nursing. The following is a census of the nursing service for the year ending September 30, 1939:

	Male	*Female*	*Total*
Superintendent of Nurses	0	1	1
Assistant Superintendent of Nurses	0	1	1
Supervisors — Chief Hospital	1	1	2
Supervisors — Assistant (Days)	2	10	12
Supervisors — Assistant (Nights)	2	11	13
Head Nurses — Registered	0	20	20
Head Nurses — Graduate	0	1	1
Hydrotherapists	2	6	8
Barbers	12	15	27
Attendant Nurses	111	182	293
Psychiatric Nurses			
Graduate Head Psychiatric Nurses	0	16	16
Graduate Psychiatric Nurses	0	2	2
Senior Psychiatric Nurses	0	0	0
Employed During Year			
Assistant Superintendent of Nurses	0	1	1
Registered Nurses	1	56	57
Charge Attendants	8	5	13
Hydrotherapists	1	1	2
Barbers	1	0	1
Physiotherapist	0	1	1
Attendant Nurses	92	150	242
Left During Year			
Assistant Superintendent of Nurses	0	1	1
Registered Nurses	1	55	56
Charge Attendant Nurses	8	5	13
Hydrotherapists	1	1	2
Head Graduate Psychiatric Nurses	0	6	6
Physiotherapist	0	1	1
Attendant Nurses	105	171	276
Classes			
Classes for Registered Nurses	0	28	28
Classes for Psychiatric Nurses	0	0	0
Classes for Attendant Nurses	110	118	228
Number of Attendant Nurses Taught	259	435	694

General Operations

Fire Protection: The training of the patients and personnel in the technics of proper conduct during a fire drill has resulted in especially efficient drills. These drills are conducted regularly twice a month and although are in charge of one of our own personnel, the fire protection engineer, they are carefully supervised and watched each time by a representative of the Boston Fire Department. The new fire escapes in the C, D, M, N, and P Buildings, which were completed in 1938, afford marked protection for patients in these buildings. The sprinkler systems in all buildings in which they are installed

are regularly checked for operation and the buildings are continuously scanned for possible fire hazards.

I think that it can be stated quite safely that at no time in the history of this institution have the patients been so well guarded against the hazards of fire.

Food: One of the most valuable accomplishments in this hospital has been the establishment of a proper dietary for the patients and employees. This has been accomplished in several ways. 1. The decrease in the number of dining rooms for serving food. 2. The decrease in the number of kitchens for serving food. 3. The insistence of good quality of raw food. 4. The insistence of careful and intelligent preparation of the raw food. 5. The utilization of one menu for the entire patient population and personnel. By these means, *i.e.*, centralization and proper management, both patients and employees are able to have a large, varied dietary, which is attractively prepared and highly satisfactory, both from an aesthetic and nutritional point of view. The primary results of this have been: 1. A greater interest in the food consumed. 2. A better nutritional state of the individual patient. 3. A total absence of nutritional and vitamin diseases in the hospital. The patients needing special diets naturally receive them.

In addition to this preparation of food, the aesthetics of the problem have been handled by the creation of clean, wholesome, and exceedingly attractive kitchens and dining rooms. These, likewise, stimulate the interest of the patient in the food he consumes and make it infinitely more pleasant for him. The kitchen where all food is prepared is spotless and is maintained thusly at all times. The dining rooms of the patients and employees are likewise kept spotless and always have the appearance of having been freshly painted. The tables upon which the patients eat are never permitted to become marred or scratched. The windows are draped in colorful curtains, and the cafeterias are kept interestingly decorated with paintings, flowers, plants, and aquaria. Patients are trained to serve food carefully and attractively in the patients' cafeteria, and derive much therapeutic value in so doing.

On the infirmary service, those patients, who are able to, are served in a small dining room, while those who are unable to leave their beds are fed food from containers kept constantly hot in electrically heated food conveyors.

Clothing and Bedding: In the course of this year more progress has been made in the utilization of clothing for patients, which is identical with what they would use if they were individuals living outside of the hospital. They are at all times properly clothed, due respect being constantly paid to the condition of the weather.

Each bed in the institution is at all times kept supplied with clean linen and mattresses.

In order to supply these articles, W.P.A. Projects have been utilized, and in conjunction with the Sewing Room, these projects have produced the following articles, besides many miscellaneous items: Bedgowns, 993; slacks, 764; shirts, 454; shorts, 1,960; dresses, 3,006; sheets, 4,481; pillow cases, 3,274.

In December, 1938, asphalt tile, which has been found to be far superior for our purposes than linoleum, was laid on the first floors of the N and P Buildings.

The East Employees' Cafeteria was completed, and the new Gatehouse completed.

The vegetable preparation room was established in the East Group for the preparation of vegetables for the entire institution.

In January, 1939, asphalt tile was laid in the J and M Buildings and the W.P.A. Cleaning Project started its work.

In February, 1939, the dark trim in the M and N Buildings was repainted a gray, making the external appearance of these buildings more attractive.

At this time 50 National Youth Administration workers reported for duty for work on the wards.

In March, 1939, the benches and settees were repainted.

In April, 1939, colorful electric table lamps were placed on the wards.

The G Building was converted into a unit for convalescent young patients.

The stenographic offices were centralized in the Reception Building.

Dr. Francis H. Sleeper, Director, State Hospital Inspection, Department of Mental Health, spent several weeks inspecting the hospital.

In June, 1939, the outdoor toilet for the patients was constructed on the West Recreation Field.

Centralized bathing units were established in the B, J, and O Buildings.

In July, 1939, 17,000 pine and Colorado spruce trees were planted.

The cafeteria in the Employees Club was discontinued.

Central clothing rooms were established for patients' property.

Colorful umbrellas and garden chairs were purchased and placed on the grounds.

Venetian blinds were placed in the Employees' Dining Room and on the windows of the Patients' Cafeterias, both East and West.

The auditors examined the hospital books.

On July 26, 1939, Mr. Paul C. Cabot and Mr. Charles W. Greenough visited the institution.

In August, 1939, twenty-nine women were transferred to this institution from the Foxborough State Hospital.

The first floor of the T Building was converted into a male parole patients' unit and 78 patients were moved into it.

The East Kitchen was closed.

On August 9, 1939, Dr. Clifton T. Perkins, Commissioner, Department of Mental Health, visited the institution.

On August 21, 1939, Hon. Maurice J. Tobin, Mayor of Boston, visited the institution.

On September 11, 1939, Fire Commissioner William Arthur Reilly visited the institution.

In October, 1939, the two porches on the H Building were enlarged.

The cafeteria in the A Building was started.

The Chapel was being renovated with French windows and the floor was stripped.

Recreational Therapy

It has been demonstrated many times that mental rehabilitation of a normal person who has been under great strain and nervous tension, or who has had to work hard at his occupation, or who has undergone a marked emotional reaction, is the participation in some sort of play activity. This play may be in the form of any type of physical or mental activity, as long as it is foreign to the original occupation and results in the precipitation of a certain amount of involuntary pleasure. In the treatment of the mentally ill person these principles hold good even more strongly than for the normal person. In order to accentuate their recovery, it is important that there be made available to them a recreational program so designed as to stimulate their interest and involve their emotions and thinking along lines which hereto had been poorly utilized, or not utilized at all.

During the fiscal year such a recreational therapy program has been developed at this hospital, and it is my firm belief that it has materially assisted in many of the remissions and recoveries which have occurred in patients housed herein. The following is an analysis of this program:

Auxiliaries:—(1) The American Legion: 52 Visits—Distribution of delicacies and smokes. 12 dancing parties, refreshments, entertainment. 52 luncheons.—Mrs. Mary McLaughlin, Chairman.

(2) Veterans of Foreign Wars: 52 Visits—Herbert J. Wolfe Post: Distribution of "Gooddies" and smokes. Louis D. Brandeis Post: 12 dancing parties, refreshments, entertainment. Lotta Crabtree Post: Passover celebration.

Bands and Orchestras:—The American Legion: 10 Concerts—Courtesy of Commanders and Directors. Catholic Youth Organization: 15 Concerts—Courtesy of Commanders and Directors. Firemen's: 12 Concerts— Courtesy of Commander Wm. Arthur Reilly. Policemen's: 12 Concerts— Courtesy of Commander Joseph F. Timilty. Salvation Army: 10 Concerts—Courtesy of Major Chester A. Brown.

Baseball Games: "Bees": 4 Games—Courtesy of J. Robert Quinn, President. "Red Sox": 4 Games—Courtesy of Thomas A. Yawkey, President.

Christmas Carollers: St. John's and St. Hugh's, Roxbury; St. Leo's, Dorchester; Parkway Churches, Milton—Courtesy of Rectors of Churches.

Christmas:—Concert—Dorothy Clarke, Director. Dancers—Gertrude Dolan Studios, Courtesy of Gertrude Dolan. Play—Colored Centre of Boston—Courtesy of Mother Mary of Grace.

Choral Singing:—Daily Singing—365 days, daily, singing by patients.

Field Days:—Recreational Grounds: Memorial Day, Bunker Hill Day, Independence Day, Labor Day, Columbus Day.

Federal Theatre Project:—Plays and entertainment—25 Appearances—Courtesy of Supervisor, W.P.A. Theatre Project.

Games:—Beano, bridge, Chinese checkers, cribbage, dominoes, parchesi, whist—700 games.

Glee Clubs:—The American Legion (2 performances)—J. J. Madden, Director. Suffolk County Auxiliary, all women.

Hikes (each 10 trips):—Arnold Arboretum, Franklin Field, Bowling-on-Green, Tennis tournaments, Franklin Park Zoo. Courtesy of William P. Long, Chairman, Park Commission.

Holidays (dancing parties):—Orchestra and Entertainment—New Year's, Lincoln's Birthday (dancing), St. Valentine's, Washington's Birthday (favors), St. Patrick's Day, Patriot's Day (refreshments), Memorial Day, Bunker Hill Day, Independence Day, Labor Day, Columbus Day, Hallowe'en, Armistice Day, Thanksgiving Day, Christmas Day.

Hockey:—Hockey games—Boston Gardens (3 trips).—Courtesy of Weston W. Adams, President.

Movies:—Best motion pictures of the year. 110 showings.

Picnics and Bus Rides:—Picnic suppers and bus rides (at the Blue Hills Boy Scout Encampment), 16 trips.

Quartettes:—The American Legion, J. J. Madden, Director. Immaculate Conception Church, Boston, Dorothy Clarke, Director. Salvation Army, Major LeRoy Stockman, Director.

Radio:—All Wards, Cafeterias, and Hydrotherapy Suites. Hourly, Daily News Casts. Daily Weather Reports. Daily Concerts (9.00 a.m. and 9.00 p.m.). Wurlitzer Recordings—"Music They Want."

Recitals:—Organ, 50 recitals.

Sports:—Seasonal and daily. Recreational Grounds (East and West). Hop-scotch, hoop rolling, kite flying, marbles, quoits, rope jumping, sliding, skating (ice and roller).

Shore "Bus Trips":—To Nantasket, Paragon Park, Pemberton, Hull. Mrs. Herbert Channing Huntress, Chairman. American Red Cross, Grey Ladies, Hostess.

Research Laboratory

During the past year the Research Division of the hospital carried out researches which are classified as follows:

I. Human autonomic pharmacology and allied subjects.
II. Biochemistry of alcohol.
III. Neuropathological studies.
IV. Vitamin deficiencies: their effects on the nervous system and the blood.
V. Sex hormone studies.
VI. Heredity studies.
VII. The "total push" method in chronic schizophrenia.
VIII. Organization activities.

I. *Human autonomic pharmacology and allied subjects:*

The main efforts of the laboratory in this field have been directed to the study and development of new drugs.

1. An interesting new chemical, furfuryl trimethyl ammonium iodide, shows the following general characteristics. It acts on the eye as a parasympathetic drug and thus narrows the palebral fissure, constricts the pupil, lowers the intra-ocular tension, and probably increases the power of accommodation. It has a marked effect upon sweating, and thus reduces the temperature of the body very effectively. It increases salivation, lacrimation, and rhinorrhea. It has little effect on blood pressure, thus differing from the true parasympathetic drugs, such as mecholyl (acetyl-beta-methylcholine chloride). It has only a moderate effect upon heart muscle. It increases gastrointestinal peristalsis and genitourinary smooth muscle activity. It probably has a clinical field of usefulness inasmuch as it can be taken by mouth. We have not as yet entered into this phase of work. A paper on this drug, which will be the first publication to concern its human pharmacology, is already prepared for publication.

2. Extensive clinical work is now going on in regard to the relationship between benzedrine (amphetamine) sulfate and the barbiturates. Present clinical studies show that the two drugs act well in correcting the excess reactions to the other drug, and furthermore produce a total effect which is of value in the neuroses and in manic-depressive psychosis.

3. One of the important pharmaceutical houses is collaborating with the director in an effort to develop new and better anti-epileptic drugs, and also to develop the interesting mood effects of benzedrine (amphetamine) sulfate by linking up its molecule with

that of other drugs having an effect on the mood. This work will probably be an important phase of the next year's activity.

4. Brain metabolism—

(*a*) An important research which has been conclusively and satisfactorily carried out has been on the question of the metabolism of sugar by the brain. This study involved the use of the jugular puncture method and is the first study of its kind. In its results it completely contraverts certain assumptions that have been made. It shows conclusively that after insulin the brain loses the power to use sugar and oxygen for a much longer period of time than the muscles of the body do, thus contradicting the statement that following insulin the therapeutic results observed are due to the greater use of oxygen and sugar by the brain. As a matter of actual fact, the brain has a reduced power to use oxygen and sugar for a considerable period of time. This research bears quite heavily on certain phases of narcosis and stupor. This study was carried out by Dr. Julius Loman.

(*b*) Certain experimental studies on metrazol were also carried out in this laboratory. It was shown that during and following the period of stupor the brain sugar was not diminished, thus distinguishing this type of reaction from that found in insulin shock. Certain other important metabolic results were observed which are incorporated in a paper soon to be published.

II. *Biochemistry of alcohol:*

Under the leadership of Dr. Max Rinkel a long series of experiments were carried out to study the quantitative relationship of alcohol in the brain, arterial and basilic bloods. These studies are still in progress. They give some measure of the activity of the brain under alcohol and will be published in extense later on.

III. *Neuropathological studies:*

Studies in neuropathology have taken interesting and important directions during the past year. These have been largely carried out by Dr. Leo Alexander in association with the director.

1. An investigation of cell minerals in various types of idiocy was carried out. This study disclosed facts of great theoretic interest and also of diagnostic importance. It showed that the ganglion cell disease of amaurotic family idiocy was characterized by demineralization of an extreme degree, whereas the cells in tuberous sclerosis showed marked hypermineralization of the cytoplasm. Consequently, amaurotic family idiocy, in respect to its ganglion cells, aligns itself with other degenerative conditions, and tuberous sclerosis with diseases of a neoplastic nature.

2. Clinical and experimental investigations of brain damage due to alcoholism and vitamin deficiency constituted an important part of the laboratory work during the past year. The major result of these studies was the experimental reproduction of Wernicke's disease (hemorrhagic polio-encephalitis) in pigeons, thus lining up vitamin deficiency with the condition found in chronic alcoholism and the associated vitamin deficiencies in man. The vitamin deficiency or imbalance was a diet rich in Vitamins A, C, D, and B_2, but lacking completely in Vitamin B_1.

3. Many other studies were carried out in collaboration with other groups, but since they did not constitute a primary part of the activities of this laboratory, they are only mentioned here. Thus, studies of the vascular system, the role of the cerebral vessels in disseminated encephalomyelitis, certain of the results and pathogenesis of electrical injury to the brain, the experimental reproduction of brain tumors, a study of the histologic changes in senile dementia and related conditions were carried out by Dr. Alexander as part of his activities as a member of other organizations.

4. The laboratory has made an interesting connection with E. I. du Pont de Nemours and Company, Inc., who most cordially sent us samples of their newest dyes which, it is anticipated, will give us new methods of staining the nervous and other tissues of the body.

IV. *Vitamin deficiencies: their effects on the nervous system and the blood:*

A Vitamin B_2 deficiency state was produced in pigeons by putting them on a diet of polished rice, at the same time giving them injections of Vitamin B_1. A characteristic deficiency state ensued, easily identified, and associated with a moderate to marked anemia and hyperplastic changes in the bone marrow. Therapies with riboflavin, nicotinic acid, and Vitamin B_6 were without effect. There was a striking effect on both the clinical and hematological aspects of the deficiency by the administration of yeast, concentrated tablets, or dilute liver extract injections. Concentrated liver extract injec-

tions had a less marked effect than the dilute form. Suggestive results were obtained with Elvehjem's anti-chick dermatitis factor. These researches were carried out by Dr. William Dameshek and Dr. Paul G. Myerson.

V. *Sex hormone studies:*

One of the most interesting activities of the laboratory has been the study of the sex hormones in the urine of patients of diverse types and under experimental conditions. The results of these investigations, carried out under the leadership of Dr. Rudolf Neustadt, may be summarized as follows, although only a hint, rather than a complete account, can be given in an abstract of this kind.

1. It has been shown that ultraviolet irradiation of the body and especially of the genitalia immediately and markedly increases the output of sex hormone, male and female, in the urine.

2. Studies carried out on thyroid gland conditions show that both hyperthyroidism and hypothyroid conditions are very definitely associated with a deficient manufacture or secretion of sexual hormones.

3. We believe we are developing a system of identification of the sexual constitution of the individual by the study of the urinary hormones. This is by far the most important part of our work and suggests leads of enormous importance for future work. We believe at the present time that we can identify the true homosexual individual by the relative amounts of male and female hormones in his urine, and that we can also identify the individual of deficient sexual drive by his hormonal content. We are receiving the collaboration of the state hospitals of Massachusetts in doing this work and within a few months will have material for a conclusive publication.

4. Studies are being carried out in this laboratory in respect to the relationship of iodine, cholesterol and the sexual hormones in the urine. This work is in a preliminary stage.

VI. *Heredity Studies:*

1. At the McLean Hospital in Waverley we have been carrying out a series of researches on the mental diseases of distinguished families. We have selected very important American families, some of whose members have been patients at the McLean Hospital, and we have attempted to build up a family tree which will indicate the amount of mental disease in these families. The point of the research is fundamentally this: The liabilities of mental disease have been sufficiently pointed out but only very sporadic attempts have been made to show that there may be some degree of asset value present. In other words, a certain amount of or certain types of mental disease may occur in gifted individuals in disproportionate amount. This has been pointed out in connection with manic-depressive psychosis by several workers. Our researches indicate the following: That if the present sterilization laws of Germany and of certain states of the United States, notably California, had been carried out in the early part of the nineteenth century, the most distinguished philosopher and the most distinguished psychologist of America would not have been born. However, very important individuals who have played a great role in the development of New England had enough mental disease in their immediate ancestors and in their collaterals to brand them, under the laws of some states and countries, as inferior individuals who should have been sterilized. In other words, the question is raised, whether or not in bringing up the matter of sterilization and mental disease, the nature of the particular and individual family group should not be taken into account, since mental disease, especially manic-depressive psychosis, may be episodic in the history of a life which, on the whole, is highly meritorious and socially valuable.

2. A research is also being carried out on a statistical basis to see whether or not the families of dementia praecox patients have a low marriage and birth rate. It has been shown quite conclusively that dementia praecox acts as a barrier to marriage. The question which we raise is whether or not the collaterals and siblings of such individuals also have a low marriage and birth rate, since it is from them that the constitutionally disabled stock comes.

This work has been carried out under the auspices of the American Neurological Association by a grant from the Carnegie Corporation. Miss Rosalie Boyle has acted as field worker, Miss Mollie S. Levin as secretary, and Drs. Tillotson and Chittick have generously collaborated.

VII. *The "total push" method in the treatment of chronic schizophrenia:*

As Chairman of the Committee on Research for the Commonwealth of Massachusetts, the director has carried out in collaboration with various other hospitals of the state and especially the McLean Hospital researches on the treatment of schizophrenia by the total push method. This was described in last year's report and needs no amplification or description here.

It has been definitely shown that even the deteriorated and chronic schizophrenics may be greatly improved in conduct, working ability, and general social contact by the total push method, which perhaps had better be described as an "increased activation method," since the technique is not that of "push" necessarily, nor is it by any stretch of the imagination "total." The results at the McLean Hospital have been very satisfactory. Patients who have been out of activity and exceedingly difficult to manage for twenty years have improved greatly in conduct, work ability, and social contact. Patients of lesser periods of disease have also done well, although no patient has been cured by the method. Utilization of the method at the McLean Hospital on acute cases has given very promising results, especially in the type of case which shows merely a passive retreat rather than a very active, hostile social attitude.

At the state hospitals where there are lesser facilities, the results have been more difficult to obtain, yet in several institutions marked improvement in the condition of the patients has been noted.

The projected program is to carry on this research for a year, during which time enough facts will have been gathered to lead to a further orientation of the problem and a more developed approach.

VIII. *Organization activities:*

1. By virtue of the fact that the director is chairman of the State Research Committee, a lineup with other hospitals has taken place in research activity. Thus, a very interesting research on the treatment of epilepsy has been carried out for three years at the Grafton State Hospital, the active worker in this institution being Dr. Benjamin Cohen. Certain drugs have been selected for experimental use and we have shown the following: (*a*) Large doses of phenobarbital effectively reduce the incidence of major epileptic attacks. When toxic symptoms occur, they can be corrected by the judicious use of benzedrine (amphetamine) sulfate. (*b*) The combination of phenobarbital and dilantin greatly enhances the value of either drug in the treatment of severe epilepsy. The attacks have been reduced 80 and more per cent, and in many instances the patients have been free of attacks indefinitely. (*c*) Mebaral is a very useful non-toxic drug in the treatment of major and minor epileptic attacks. So far as our researches go, it is equal to either dilantin or phenobarbital.

2. The director is a member of the Research Council for the Study of Alcoholism for the American Association for the Advancement of Science and as such is collaborating on the study of alcoholism throughout the United States.

3. The director has just been appointed consultant in research on drug addiction to the government hospital in Louisville, Kentucky.

* * * *

Acknowledgments are made to the Commonwealth of Massachusetts, the Rockefeller Foundation, the Child Neurology Research (Friedman Foundation), the Charlton Fund (Tufts College Medical School), the Carnegie Corporation of New York, the Emergency Committee for the Displacement of Foreign Medical Scientists, the Works Progress Administration Project No. 18088, and to the following pharmaceutical houses: Smith, Kline and French Laboratories; Winthrop Chemical Co.; Sharp and Dohme; Merck and Co.; and Hoffman-La Roche.

Papers Published

1. Summary of the report of the American Neurological Association Committee for the investigation of Sterilization. Am. J. Medicaljurisprudence 1:253–257 (Dec.) 1938. (A. Myerson.)

2. Beri-beri and scurvy. An experimental study. Trans. Am. Neurol. Assoc., The William Byrd Press, Richmond, Va. *64:*135–139, 1938. (L. Alexander, A. Myerson, M. Pijoan.)

3. Photo-colorimetric method for the determination of androsterones in urine. Endocrinology *29:*711–717 (Dec.) 1938. (R. Neustadt.)

4. Human Autonomic Pharmacology. XVII. The effect of acetyl-beta-methylcholine chloride on the gall bladder. Am. J. Digest, Dis. *5*:687–690 (Dec.) 1938. (P. G. Schube, A. Myerson, R. Lambert.)

5. The relation of the autonomic nervous system to pharmacology. J. Conn. State Med. Society *8*:19–21 (Jan.) 1939. (A. Myerson.)

6. The effect of benzedrine, benzedrine and atropine, and atropine on the gall bladder. Am. J. Med. Sci. *197*:57–61. (Jan.) 1939. (P. G. Schube, A. Myerson, R. Lambert.)

7. Human Autonomic Pharmacology. XV. The effect of acetyl-beta-methylcholine chloride (mecholyl) by iontophoresis on arterial hypertension. Annals Int. Med. *12*:1213–1222 (Feb.) 1939. (J. Loman, M. F. Lesses, A. Myerson.)

8. Comparative effects of amphetamine sulfate (benzedrine sulfate), paredrine and propadrine on the blood pressure. Am. Heart J. *18*:89–93 (July) 1939. (J. Loman, M. Rinkel, A. Myerson.)

9. The reciprocal pharmacologic effects of amphetamine (benzedrine) sulfate and the barbiturates. New England J. Med. *221*:561–563 (Oct. 12) 1939. (A. Myerson.)

10. Benzedrine sulphate—an antidote for the untoward hypnotic and ataxic effects of phenobarbital in the treatment of epilepsy. In "Symposium on Therapy"; Bull. Mass. Dept. of Mental Health, Sept. 1939. (B. Cohen, A. Myerson.)

11. Theory and principles of the "total push" method in the treatment of chronic schizophrenia. Am. J. Psychiat. *95*:1197–1204 (March) 1939. (A. Myerson.)

12. Influence of ultraviolet irradiation upon excretion of sex hormones in the male. Endocrinology *25*:7–12 (July) 1939. (A. Myerson, R. Neustadt.)

13. The reaction of the cerebral vessels to intracarotid injection of horse serum in sensitized and non-sensitized guinea pigs. Confinia Neurologica *2*:215–219, 1939. (A. Buermann, L. Alexander.)

14. Cell minerals in amaurotic idiocy, tuberous sclerosis and related conditions, studied by microincineration and spectroscopy. Examples of degenerative and of neoplastic cell disease. Am. J. Psychiat. *96*:77–85 (July) 1939. (L. Alexander, A. Myerson.)

15. The relationship of hereditary factors to mental processes. Research Pub. Assoc. Res. in Nerv. & Ment. Dis. *19*:16–49 (Sept.) 1939. (A. Myerson.)

16. Sources of mental disease; their amelioration and prevention. Summary and critique. Pub. No. 9, p. 120–136 of American Association for the Advancement of Science, 1939. (A. Myerson.)

17. Alcoholism and mental disease. Pub. No. 9, p. 83–90, American Association for the Advancement of Science, 1939. (L. Alexander.)

Papers in Press

1. Topographic and histologic identity of the experimental (avitaminotic) Wernicke lesions with those occurring in hemorrhagic polioencephalitis in chronic alcoholism in man. (L. Alexander.) Am. J. Pathol.

2. The rationale of amphetamine (benzedrine) sulfate therapy. (A. Myerson.) Am. J. Med. Sci.

3. The effect of amphetamine sulfate (benzedrine sulfate) and paredrine hydrobromide upon sodium amytal narcosis. (A. Myerson, J. Loman, M. Rinkel, M. F. Lesses.) New England J. Med.

4. The synergism of phenobarbital, dilantin, and other drugs in the treatment of institutional epilepsy. (B. Cohen, N. Showstack, A. Myerson.) J. A. M. A.

5. Changes in oxygen, carbon dioxide and sugar content in the arterial and internal jugular blood during metrazol convulsions. (J. Loman, M. Rinkel, A. Myerson.) Arch. Neurol. & Psychiat.

6. The attitudes of neurologists, psychiatrists, and psychologists towards psychoanalysis. (A. Myerson.) Am. J. Psychiat.

7. Total Push Method. III. Schema for the recording of certain important attitudes in chronic schizophrenia. (A. Myerson.) Am. J. Psychiat.

8. The social psychology of alcoholism. (A. Myerson.) Diseases of the Nervous System.

9. A distinctive vitamin B deficiency state in pigeons. (W. Dameshek, P. G. Myerson.) Am. J. Med. Sci.

10. Errors and problems in psychiatry. (A. Myerson.) Mental Hygiene.

Papers Read

1. A group of neurological conditions of interest to the general practitioner: electrical injuries, eastern equine encephalitis, brain diseases due to chronic alcoholism. (Read by L. Alexander before the North Shore Medical Society, Dec. 8, 1938.)

2. Human Autonomic Pharmacology. (Read by A. Myerson before the St. Luke's Guild at Boston State Hospital, Dec. 14, 1938.)

3. The total push method in the treatment of schizophrenia. (Read by A. Myerson before the Boston Society of Psychiatry and Neurology, Dec. 15, 1938.)

4. Problems of vitamin deficiency and the nervous system. (Read by A. Myerson before the Hartford City Medical Society, Dec. 19, 1938.)

5. Electrical injuries. (Read by L. Alexander before the Utilities Accident Prevention Committee of New England, Dec. 20, 1938.)

6. Sources of mental disease: their amelioration and prevention. (Read by A. Myerson before the American Association for the Advancement of Science, Richmond, Va., Dec. 28, 1938.)

7. The relationship of hereditary factors to mental processes. (Read by A. Myerson before the Association for Research in Nervous and Mental Disease, New York City, Dec. 27, 1938.)

8. The neuropathology of alcoholism. (Read by L. Alexander before the Boston Society of Psychiatry and Neurology, Jan. 19, 1939.)

9. Brain waves. (Read by J. Loman before the Phi Lambda Kappa Medical Fraternity, Jan. 20, 1939.)

10. Theory and practice of the "total push" method in the treatment of chronic schizophrenia. (Read by A. Myerson and K. Tillotson before the Massachusetts Psychiatric Society, Jan. 27, 1939.)

11. Clinical syndromes in neurology. (Read by J. Loman before the Attleboro Medical Society, Feb. 3, 1939.)

12. Physiotherapeutics and motivation in the treatment of chronic schizophrenia. (Read by A. Myerson before the New England Society of Physical Medicine, March 15, 1939.)

13. Human autonomic pharmacology. (Read by J. Loman before the Sir William Osler Honor Society of the Middlesex University School of Medicine, April 26, 1939.)

14. The total push method of treatment of chronic schizophrenia. (Read by A. Myerson and K. J. Tillotson before the American Psychiatric Association, Chicago, Ill., May 12, 1939.)

15. The neuroses. (Read by A. Myerson before the Central Association of Public Health Nurses, Grafton State Hospital, May 26, 1939.)

16. The total push method in the treatment of chronic schizophrenia (with demonstrations). (Read by A. Myerson before staff members of the various state hospitals of Massachusetts at the McLean Hospital, May 26, 1939.)

17. Cell minerals in amaurotic idiocy, tuberous sclerosis and related conditions, studied by microincineration and spectroscopy. (Read by L. Alexander and A. Myerson before the American Association on Mental Deficiency, Chicago, Ill., May 3, 1939.)

18. Exhibit: Mineral studies of the brain by means of microincineration and spectroscopy: Exhibit of apparatus used; photomicrographs of normal and pathologic brain tissue; reproductions of spectroscopic graphs. (By L. Alexander and A. Myerson at the American Medical Association, St. Louis, Mo., May 15–19, 1939.)

19. The social psychology of alcoholism. (Read by A. Myerson before the American Psychopathological Association, Atlantic City, N. J., June 5, 1939.)

20. The synergism of phenobarbital, dilantin and other drugs in the treatment of institutional epilepsy. (Read by B. Cohen, N. Showstack, and A. Myerson before the American Psychopathological Association, Atlantic City, N. J., June 5, 1939.)

21. Neuropathological aspects of alcoholism. (Read by L. Alexander before the American Psychopathological Association, Atlantic City, N. J., June 5, 1939.)

22. Topographic and histologic identity of the experimental (avitaminotic) Wernicke lesions with those occurring in hemorrhagic polioencephalitis in chronic alcoholism in man. (Read by L. Alexander before the American Association of Neuropathologists, Atlantic City, N. J., June 5, 1939.)

23. Intracranial dynamics. (Read by J. Loman before the American Psychopathological Association, Atlantic City, N. J., June 5, 1939.)

24. The legal side of medicine, or the doctor in court. (Read by A. Myerson before the Boston City Hospital House Officers' Association, June 28, 1939.)

25. Human autonomic pharmacology (with exhibit). (Read by A. Myerson before the Third International Neurological Congress, Copenhagen, Denmark, August 21–25, 1939.)

26. Beri-beri and Wernick's hemorrhagic polioencephalitis. An experimental study. (Read by L. Alexander before the Third International Neurological Congress, Copenhagen, Denmark, August 25, 1939.)

27. Heredity and environment in relationship to intelligence, personality and mental disease. (Read by A. Myerson before the Boston Dispensary Staff, October 20, 1939.)

28. Clinical review of the disorders of motion. (Read by A. Myerson before the Jewish Memorial Hospital, October 31, 1939.)

29. The theories and facts of the inheritance of mental disease, and the value of sterilization. (Read by A. Myerson before the New York Academy of Medicine, New York City, November 30, 1939.)

Financial Statement

The appropriation for maintenance for the past year was $1,137,215.66, plus an amount of $174.27 brought forward from 1938, making a total appropriation of $1,137,389.93. The expenditures amounted to $1,118,667.28, giving a weekly cost for patient of $9.312. This was for an average of 2,310.1991 patients.

The estimate for maintenance for the coming year, based on a patient population of 2,460 is as follows:

Personal services	$670,000.00
Travel, transportation and office expenses	9,600.00
Food	247,000.00
Clothing and materials	34,100.00
Religious instruction	2,080.00
Furnishings and household supplies	36,200.00
Medical and general care	26,000.00
Heat and other plant operations	97,525.00
Farm	—
Garage and grounds	9,250.00
Repairs ordinary	16,225.00
Repairs and renewals	16,000.00
	$1,163,980.00

Recommendations

In order that this institution can be increased in its efficient functioning and at the same time provide adequate care, treatment, and security for the mentally ill patients, some improvements need to be made.

One of the most serious menaces to the health and to the safety of the patients is an open stream which passes through our property. This stream drains unclean areas in addition to the cemetery, and from this point of view is dangerous to the health of our patients. In addition to this, the water is deep enough to drown in, and there is always the possibility that one of our patients, sooner or later, will drown in this stream. It is my feeling that this waterway should be completely covered over on the hospital property. The cost to do this will be approximately $100,000.

There are five stucco buildings on the hospital grounds, all designed to house patients. Three of them are housing patients at the present time. Although these buildings all have adequate fire escapes, and are protected with a water sprinkling system in case of fire, the most dangerous of all hazards in the production of fire still remains and is forced to function in these buildings, *i.e.*, old electrical wiring which cannot be repaired because any attempt to repair only results in further damage to it. All of this wiring should be removed from these buildings and new wiring installed. The cost of this will be approximately $50,000.

The entire electrical system of this hospital is fed by one power plant. The interruption of the flow of electricity from the power plant shuts down all electrical lightings machinery, and appliances. During the day this is not too serious, but when it happen, during the night, the entire hospital is thrown into total darkness. In order to prevent

the interruption of this electricity to the lighting system of the hospital, I feel that the most vulnerable part of this system should be protected, *i.e.*, the power lines from the power plant should be placed underground. They are now strung overhead on poles and several times storms have torn them down. The cost of placing these lines underground would be approximately $40,000.

This hospital, which houses 2,322 patients, is spread over 224.66 acres of ground and in the heart of Boston. Its property is divided by an arterial highway which acts as a transportation trunk line between Boston and the Cape. This highway, because of the high speed which is developed upon it, creates a serious hazard relative to the movement of patient population across it. This movement of the population across this highway is necessary because of the eccentric location of our industries, the presence of an antequated auditorium on one side of the street, and the recreation field upon the other. Each patient walking across that street, regardless of the supervision, is in danger of his or her life from autoists. In order to eliminate this hazard, I feel that a tunnel should be bored under Morton Street and a passageway made thereunder to handle the hospital traffic. The cost of this would be approximately $60,000.

Except for a few buildings in the East Group, one of the buildings in this entire institution, are connected with each other or with the patients' dining rooms. Inasmuch as practically all of the patients are fed in three cafeterias, this means that in order to feed the patients, they must go out of doors to their meals, regardless of the weather. It might be argued that they should be fed in their respective buildings but such decentralization is impractical and perpetually costly. This movement of patients out of doors, holds equally true of the transfer of patients from building to building. This movement is imperative and can be properly handled in only one manner, *i.e.*, by the erection of tunnels interconnecting buildings and connecting buildings with the dining rooms. To do this work will cost approximately $85,000.

One of the most massive parts of this hospital is the entertainment program. A large portion of this entertainment is carried out indoors and at night in the auditorium. This auditorium is located in the East Group, where there are housed 686 patients, only a small number of whom go to these entertainments at night. These entertainments are attended primarily by patients from the West Group, where there are 1,636 patients housed. Because of the long walk necessitated, it is necessary for patients going from the West Group to the East Group to attend the entertainments, not only to walk a long distance, but to cross the dangerous intersection at Morton and Harvard Streets. A large auditorium should be erected in the West Group. This building would cost approximately $192,000.

Conclusion

I wish to extend my thanks to the members of the Board of Trustees for their co-operation and helpfulness at all times during the past year and to assure them that it has been appreciated by me.

The death of Dr. Thomas J. Scanlan, Chairman of the Board of Trustees, on October 18, 1939, after more than twenty-five years of service as a Trustee of State Hospitals, was a great loss.

I wish also to thank the medical staff, the various department heads, and all of the employees for all they have contributed to the health and happiness of our patients during the past year.

Respectfully submitted,

Harold F. Norton,
Superintendent.

VALUATION

November 30, 1939

Real Estate

Land, 224.66 acres	$974,100.00
Buildings and Betterments	3,814,468.36
	$4,788,568.36

FINANCIAL REPORT

To the Department of Mental Health:

I respectfully submit the following report of the finances of this institution for the fiscal year ending November 30, 1939.

Statement of Earnings

Board of Patients		$82,260.08
Personal Services		336.57
Sales:		
Food	$726.24	
Furnishings and household supplies	21.50	
Medical and general care	3.00	
Repairs ordinary	124.50	
Miscellaneous	79.92	
Farm: 1 Boar	5.00	
Total Sales		960 16
Miscellaneous		70.32
Total earnings for the year		$83,627.13
Total cash receipts reverting and transferred to the State Treasurer		83,620.13
Accounts receivable outstanding Nov. 30, 1939	$7.00	
Accounts receivable increased		7.00

Maintenance Appropriation

Balance from previous year, brought forward		$174.27
Appropriation, current year		1,137,215.68
Total		$1,137,389.95
Expenditures as follows:		
Personal services	$638,069.82	
Food	241,540.69	
Medical and general care	20,831.50	
Religious instruction	2,081.65	
Farm	—	
Heat and other plant operation	96,893.90	
Travel, transportation and office expenses	9,365.90	
Garage, $8,137.10; grounds, $1,115.37	9,252.47	
Clothing and materials	33,863.10	
Furnishings and household supplies	33,019.58	
Repairs ordinary	14,720.16	
Repairs and renewals	19,028.51	
Total maintenance expenditures		$1,118,667.28
Balance of maintenance appropriation, Nov. 30, 1939		18,722.67

Special Appropriations

Balance December 1, 1938, brought forward		$52,944.93
Appropriations for current year		67,500.00
Total		$120,444.93
Expended during the year	$38,863.14	
Reverting to Treasury of Commonwealth	16.93	38,880.07
Balance November 30, 1939; carried to next year		$81,564.86

Appropriation	Act or Resolve	Total Amount Appropriated	Expended during fiscal year	Total Expended to date	Balance at end of year
	Yr. Ch.				
Iron fence	1937–434	$13,000.00	$749.50	$12,792.22	$207.78
W.P.A. materials	1938–497	15,000.00	4,123.29	4,123.29	10,876.71
Hurricane and flood damages	1938–307	14,000.00	12,235.17	12,619.53	1,380.47
Fire protection	1937–234	62,200.00	21,103.51	60,591.44	1,608.56
Renewing and renovating plumbing	1939–309	42,500.00	651.67	35,008.66	7,491.34
Sterilization equipment	1937–234	3,000.00	—	2,983.07	16.93*
Steam lines	1939–309	60,000.00	—	—	60,000.00
		$209,700.00	$38,863.14	$128,118.21	$81,581.79

* As of 3/31/39.

Per Capita

During the year the average number of patients has been, 2,310.1991.
Total cost of maintenance, $1,118,667.28.
Equal to a weekly per capita cost of (52 weeks to year), $9.3121.
Total receipts for the year, $83,627.13.
Equal to a weekly per capita of $.6961.
Total net cost of maintenance for year, $1,035,040.15.
Net weekly per capita, $8.616.

Respectfully submitted,

Rose J. Siciliano,
Treasurer.

Financial Statement Verified.
Approved.

George E. Murphy,
Comptroller.

STATISTICAL TABLES

As Adopted by the American Psychiatric Association, Prescribed by the Massachusetts Department of Mental Health

Table 1. *General Information*

(Data correct at end of institution year November 30, 1939)

Date *of opening* as a hospital for mental diseases: December 11, 1839.
Type of hospital: State.
Hospital plant:
Value of hospital property:

Real estate, including buildings	$4,788,568.36
Total	$4,788,568.36

Total acreage of hospital property owned, 224.66.
Officers and employees:

	Actually in Service at End of Year			Vacancies at End of Year		
	M.	F.	T.	M.	F.	T.
Superintendents	1	–	1	–	–	–
Assistant physicians	14	1	15	1	–	1
Clinical assistants	1	–	1	–	–	–
Total physicians	16	1	17	1	–	1
Stewards	2	–	2	–	–	–
Resident dentists	1	–	1	–	–	–
Pharmacists	1	–	1	–	–	–
Graduate nurses	–	80	80	–	13	13
Other nurses and attendants	133	207	340	3	2	5
Occupational therapists	5	12	17	–	–	–
Social workers	–	5	5	–	–	–
All other officers and employees	142	108	250	3	4	7
Total officers and employees	300	413	713	7	19	26

Classification by Diagnosis—September 30, 1939

Census of Patient Population at end of year:

	Actually in Hospital			Absent from Hospital but still on Books		
	M.	F.	T.	M.	F.	T.
White:						
Insane	966	1,265	2,231	147	161	308
Mental defectives	–	2	2	–	–	–
Alcoholics	1	–	1	–	–	–
All other cases	7	10	17	–	3	3
Total	974	1,277	2,251	147	164	311
Other Races:						
Insane	39	32	71	7	10	17
All other cases	–	–	–	–	1	1
Total	39	32	71	7	11	18
Grand Total	1,013	1,309	2,322	154	175	329

	M.	F.	T.
Patients under treatment in occupational-therapy classes, including physical training, on date of report	1,048	1,164	2,212
Other patients employed in general work of hospital on date of report	332	354	686
Average daily number of all patients actually in hospital during year	1,016.06	1,301.40	2,317.46
Voluntary patients admitted during year	4	7	11
Persons given advice or treatment in out-patient clinics during year	61	55	116

TABLE 2. *Movement of Patient Population for the Year Ended September 30, 1939*

	Total			Regular Court Commitment (Insane)			Observation			Temporary Care			Voluntary		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Patients on books at the beginning of the year:															
In hospital	1,045	1,341	2,386	1,037	1,337	2,374	7	1	8	1	2	3	–	1	1
On visit or otherwise absent	129	138	267	129	138	267	–	–	–	–	–	–	–	–	–
Total	1,174	1,479	2,653	1,166	1,475	2,641	7	1	8	1	2	3	–	1	1
Admissions during year:															
First admissions	327	377	704	239	274	513	45	12	57	41	91	132	2	–	2
Readmissions	164	170	334	117	118	235	25	14	39	20	31	51	2	7	9
Total admissions	491	547	1,038	356	392	748	70	26	96	61	122	183	4	7	11
Transfers from other mental hospitals	5	32	37	5	32	37	–	–	–	–	–	–	–	–	–
Total received during year	496	579	1,075	361	424	785	70	26	96	61	122	183	4	7	11
Total on books during year	1,670	2,058	3,728	1,527	1,899	3,426	77	27	104	62	124	186	4	8	12
Discharged from books during year:															
As recovered	125	111	236	115	100	215	5	4	9	4	7	11	1	–	1
As improved	117	145	262	98	121	219	9	3	12	9	20	29	1	1	2
As unimproved	39	88	127	17	22	39	3	–	3	19	65	84	–	1	1
As without psychosis	80	49	129	3	3	6	51	18	69	25	26	51	1	2	3
Total discharged to community	361	393	754	233	246	479	68	25	93	57	118	175	3	4	7
Transferred to other mental hospitals	12	9	21	12	9	21	–	–	–	–	–	–	–	–	–
Died during year	130	172	302	123	167	290	1	–	1	5	5	10	1	–	1
Total discharged, transferred and died during year	503	574	1,077	368	422	790	69	25	94	62	123	185	4	4	8
Patients remaining on books of hospital at end of year:															
In hospital	1,013	1,309	2,322	1,005	1,302	2,307	8	2	10	–	1	1	–	4	4
On visit or otherwise absent	154	175	329	154	175	329	–	–	–	–	–	–	–	–	–
Total	1,167	1,484	2,651	1,159	1,477	2,636	8	2	10	–	1	1	–	4	4

SUPPLEMENTARY DATA

	Males	Females	Total
Average daily number of patients on books during year	1,154.95	1,463.66	2,618.61
Actually in institution during year	1,016.06	1,301.40	2,317.46
In family care	–	2.00	2.00
On visit	134.48	158.31	292.79
On escape	4.41	1.95	6.36
Number of patients actually remaining in institution September 30, 1939:			
State	941	1,144	2,085
Reimbursing	72	164	236
Ex-service patients paid by Federal Government	–	1	1
Number of non-insane patients in hospital at end of institution year:			
Mentally defective	–	2	2
Others	8	10	18

TABLE 3. *Nativity of First Admissions and of Parents of First Admissions*

NATIVITY	PATIENTS			PARENTS OF MALE PATIENTS			PARENTS OF FEMALE PATIENTS		
	M.	F.	T.	Fathers	Mothers	Both Parents	Fathers	Mothers	Both Parents
United States[1]	191	209	400	96	90	75	89	93	78
Austria	–	–	–	–	–	–	–	1	–
Canada[2]	22	38	60	27	33	20	45	39	33
Central America	1	–	1	–	–	–	–	–	–
China	1	–	1	1	1	1	–	–	–
Czecho-Slovakia	–	–	–	1	–	–	–	–	–
Cuba	–	–	–	1	–	–	–	–	–
England	7	12	19	10	6	4	10	8	5
France	1	1	2	1	2	1	2	1	1
Germany	4	3	7	9	8	8	7	6	5
Greece	–	–	–	1	1	1	3	2	2
Holland	–	1	1	–	–	–	1	1	1
Hungary	–	1	1	–	–	–	1	1	1
Ireland	36	61	97	80	84	73	116	124	110
Italy	22	22	44	32	32	32	30	29	29
Mexico	–	1	1	–	–	–	1	1	1
Norway	2	–	2	2	2	2	–	–	–
Philippine Islands	–	–	–	–	–	–	1	1	1
Poland	3	6	9	6	7	6	8	9	8
Portugal	1	1	2	1	1	1	3	3	3
Russia	13	9	22	17	16	16	11	11	10
Scotland	5	–	5	6	4	3	7	3	2
South America	–	1	1	–	1	–	–	–	–
Sweden	3	1	4	3	4	3	1	3	1
Switzerland	1	1	2	–	–	–	–	–	–
Turkey in Asia	1	–	1	1	1	1	–	–	–
Wales	1	–	1	1	1	1	1	1	–
West Indies[3]	4	1	5	4	4	4	1	1	1
Other Countries	6	6	12	8	8	7	8	7	7
Unknown	2	2	4	19	21	19	31	32	28
Total	327	377	704	327	327	278	377	377	327

[1] Persons born in Hawaii, Porto Rico and the Virgin Islands should be recorded as born in the United States.

[2] Includes Newfoundland.

[3] Except Cuba, Porto Rico and Virgin Islands.

TABLE 4. *Age of First Admissions Classified with Reference to Nativity, and Length of Residence in the United States of the Foreign Born*

Age At Admission	Aggregate			NATIVE BORN												FOREIGN BORN												Nativity Unknown		
				Total			Parentage										Total			Time in United States before Admission											
							Foreign			Mixed			Native			Unknown				10–14 years			15 years and over			Unknown					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0–14 years	1	2	3	1	2	3	1	–	1	–	–	–	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15–19 years	14	10	24	14	10	24	5	3	8	2	3	5	7	3	10	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20–24 years	12	12	24	11	12	23	4	7	11	3	1	4	3	3	6	1	1	2	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–
25–29 years	21	30	51	19	27	46	7	13	20	3	3	6	8	10	18	1	1	2	2	3	5	1	2	3	1	–	1	–	1	1	–	–	–
30–34 years	13	16	29	11	13	24	5	4	9	5	1	6	1	7	8	–	1	1	2	3	5	–	–	–	1	2	3	1	1	2	–	–	–
35–39 years	26	29	55	15	23	38	8	9	17	1	4	5	5	10	15	1	–	1	11	6	17	–	2	2	9	4	13	2	–	2	–	–	–
40–44 years	24	20	44	14	12	26	5	6	11	4	1	5	4	4	8	1	1	2	10	8	18	1	1	2	8	7	15	1	–	1	–	–	–
45–49 years	18	32	50	15	16	31	9	6	15	1	3	4	5	7	12	–	–	–	3	16	19	–	–	–	3	11	14	–	5	5	–	–	–
50–54 years	34	30	64	15	15	30	6	6	12	–	3	3	8	5	13	1	1	2	19	15	34	–	–	–	19	13	32	–	2	2	–	–	–
55–59 years	28	26	54	14	10	24	5	5	10	3	–	3	5	4	9	1	1	2	13	16	29	–	–	–	13	15	28	–	1	1	1	–	1
60–64 years	33	35	68	21	14	35	8	7	15	6	1	7	5	6	11	2	–	2	12	21	33	–	–	–	9	18	27	3	3	6	–	–	–
65–69 years	33	33	66	19	16	35	7	7	14	4	1	5	6	5	11	2	3	5	14	17	31	1	–	1	11	13	24	2	4	6	–	–	–
70–74 years	26	43	69	12	17	29	–	10	10	–	2	2	10	2	12	2	3	5	14	24	38	–	–	–	12	19	31	2	5	7	–	2	2
75–79 years	21	29	50	6	9	15	–	2	2	1	1	2	5	5	10	–	1	1	14	20	34	–	–	–	14	18	32	–	2	2	1	–	1
80–84 years	14	18	32	2	8	10	1	3	4	–	–	–	1	3	4	–	2	2	12	10	22	–	–	–	11	9	20	1	1	2	–	–	–
85 years and over	9	12	21	2	5	7	–	2	2	–	–	–	2	3	5	–	–	–	7	7	14	–	–	–	5	6	11	2	1	3	–	–	–
Total . .	327	377	704	191	209	400	71	90	161	33	24	57	75	78	153	12	17	29	134	166	300	3	5	8	117	135	252	14	26	40	2	2	4

TABLE 5. *Citizenship of First Admissions*

	M.	F.	T.
Citizens by birth	191	209	400
Citizens by naturalization	59	51	110
Aliens	30	40	70
First papers	13	5	18
Citizenship unknown	34	72	106
Total	327	377	704

TABLE 6. *Race of First Admissions Classified with Reference to Principal Psychoses*

RACE	TOTAL			With syphilitic meningo-encephalitis			With other forms of syphilis			With epidemic encephalitis			With other infectious diseases			Alcoholic psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	22	16	38	4	1	5	1	–	1	–	–	–	–	–	–	–	1	1
Armenian	2	1	3	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1
Chinese	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	9	15	24	–	–	–	–	–	–	–	1	1	–	–	–	1	1	2
French	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
German	9	7	16	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2
Greek	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	17	17	34	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Irish	81	116	197	2	1	3	–	1	1	–	–	–	–	1	1	14	4	18
Italian[1]	34	31	65	2	–	2	1	–	1	–	–	–	–	–	–	2	–	2
Lithuanian	5	5	10	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Mexican	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Portuguese	1	3	4	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	5	1	6	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1
Scotch	6	4	10	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Slavonic[3]	7	8	15	1	–	1	–	–	–	–	–	–	–	–	–	1	2	3
Syrian	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Welsh	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
West Indian[4]	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Other specific races	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	118	139	257	4	2	6	–	–	–	–	–	–	–	–	–	13	3	16
Race unknown	5	8	13	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Total	327	377	704	18	4	22	2	1	3	–	1	1	1	1	2	39	11	50

TABLE 6. *Race of First Admissions Classified with Reference to Principal Psychoses* — Continued

RACE	Due to drugs, etc.			Traumatic psychoses			With cerebral arteriosclerosis			With other disturbances of circulation			With convulsive disorders (epilepsy)			Senile psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	–	–	–	–	–	9	4	13	–	–	–	–	–	–	–	1	1
Armenian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chinese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	–	–	–	–	–	–	5	9	14	–	–	–	–	–	–	–	–	–
French	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
German	–	–	–	–	1	1	5	4	9	–	–	–	–	–	–	–	–	–
Greek	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	–	–	–	–	–	–	6	8	14	–	1	1	–	–	–	–	–	–
Irish	–	–	–	–	–	–	31	56	87	1	–	1	–	1	1	1	7	8
Italian[1]	–	–	–	–	–	–	5	12	17	–	–	–	–	1	1	–	1	1
Lithuanian	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1
Mexican	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Portuguese	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	–	1	–	1	2	–	2	–	–	–	–	–	–	–	–	–
Scotch	–	–	–	–	–	–	5	1	6	–	–	–	–	–	–	–	–	–
Slavonic[3]	–	–	–	–	–	–	1	3	4	–	–	–	–	–	–	–	–	–
Syrian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Welsh	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
West Indian[4]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	1	1	2	–	–	–	39	51	90	1	–	1	1	4	5	1	4	5
Race unknown	–	–	–	–	–	–	4	6	10	–	–	–	–	–	–	–	1	1
Total	1	1	2	1	1	2	112	157	269	2	1	3	1	6	7	3	14	17

[1]Includes "North" and South."
[2]Norwegians, Danes, and Swedes.
[3]Includes Bohemian, Bosnian, Croatian, Dalmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.
[4]Except Cuba.

TABLE 6. *Race of First Admissions Classified with Reference to Principal Psychoses* — Continued

RACE	Involutional psychoses			Due to other metabolic diseases, etc.			Due to new growth			With organic changes of nervous system			Psycho-neuroses			Manic-depressive psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	1	1	–	1	1	–	–	–	–	–	–	–	1	1	–	1	1
Armenian	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Chinese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
French	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
German	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–
Greek	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1
Hebrew	–	3	3	2	–	2	–	–	–	–	–	–	–	–	–	2	–	2
Irish	3	7	10	3	1	4	–	–	–	4	4	8	1	2	3	2	4	6
Italian[1]	3	2	5	–	1	1	–	–	–	3	–	3	1	1	2	2	3	5
Lithuanian	–	–	–	1	1	2	–	–	–	1	–	1	–	–	–	–	–	–
Mexican	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Portuguese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scotch	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Slavonic[3]	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Syrian	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Welsh	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
West Indian[4]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	3	11	14	3	3	6	1	–	1	2	–	2	1	3	4	2	14	16
Race unknown	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Total	10	26	36	10	7	17	1	–	1	11	5	16	3	9	12	8	27	35

TABLE 6. *Race of First Admissions Classified with Reference to Principal Psychoses* — Concluded

RACE	Dementia praecox			Paranoia and paranoid conditions			With psychopathic personality			With mental deficiency			Undiagnosed psychoses			Without psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	3	2	5	1	1	2	–	–	–	–	–	–	–	–	–	4	2	6
Armenian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chinese	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	3	2	5
French	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
German	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2
Greek	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Hebrew	5	3	8	–	1	1	–	1	1	–	–	–	–	–	–	1	–	1
Irish	6	9	15	–	5	5	–	–	–	–	1	1	1	6	7	12	6	18
Italian[1]	4	6	10	2	–	2	–	1	1	4	–	4	–	1	1	5	2	7
Lithuanian	1	1	2	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1
Mexican	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Portuguese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Scandinavian[2]	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scotch	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Slavonic[3]	1	1	2	–	–	–	–	–	–	1	–	1	–	–	–	1	–	1
Syrian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Welsh	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
West Indian[4]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other specific races	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	19	23	42	3	3	6	–	2	2	3	1	4	1	4	5	20	10	30
Race unknown	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	40	48	88	6	11	17	–	4	4	8	3	11	2	14	16	48	25	73

[1]Includes "North" and "South."
[2]Norwegians, Danes and Swedes.
[3]Includes Bohemian, Bosnian, Croatian, Dalmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.
[4]Except Cuba.

TABLE 7. *Age of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			0–14 years			15–19 years			20–24 years			25–29 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	–	–	–	–	–	–	–	–	–	1	–	1
With other forms of syphilis	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	39	11	50	–	–	–	–	–	–	–	–	–	1	–	1
Due to drugs, etc.	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
Traumatic psychoses	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	112	157	269	–	–	–	–	–	–	–	–	–	–	–	–
With other disturbances of circulation	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–
With convulsive disorders (epilepsy)	1	6	7	–	–	–	–	–	–	–	–	–	–	3	3
Senile psychoses	3	14	17	–	–	–	–	–	–	–	–	–	–	–	–
Involutional psychoses	10	26	36	–	–	–	–	–	–	–	–	–	–	–	–
Due to other metabolic diseases, etc.	10	7	17	–	–	–	–	–	–	–	–	–	–	1	1
Due to new growth	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	11	5	16	–	–	–	2	–	2	–	–	–	1	1	2
Psychoneuroses	3	9	12	–	–	–	–	–	–	–	1	1	–	–	–
Manic-depressive psychoses	8	27	35	–	–	–	–	1	1	–	4	4	–	5	5
Dementia praecox	40	48	88	–	–	–	5	5	10	7	5	12	11	14	25
Paranoia and paranoid conditions	6	11	17	–	–	–	–	–	–	–	–	–	–	–	–
With psychopathic personality	–	4	4	–	–	–	–	1	1	–	–	–	–	2	2
With mental deficiency	8	3	11	1	–	1	2	1	3	1	1	2	1	–	1
Undiagnosed psychoses	2	14	16	–	–	–	–	–	–	–	1	1	–	2	2
Without psychoses	48	25	73	–	2	2	5	2	7	4	–	4	6	2	8
Total	327	377	704	1	2	3	14	10	24	12	12	24	21	30	51

TABLE 7. *Age of First Admissions Classified with Reference to Principal Psychoses* — Continued

PSYCHOSES	30–34 years			35–39 years			40–44 years			45–49 years			50–54 years			55–59 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	1	1	2	4	–	4	1	–	1	2	2	4	4	–	4	3	–	3
With other forms of syphilis	–	–	–	2	–	2	–	–	–	–	1	1	–	–	–	–	–	–
With epidemic encephalitis	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
With other infectious diseases	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–
Alcoholic psychoses	3	2	5	5	–	5	6	–	6	4	3	7	9	4	13	7	–	7
Due to drugs, etc.	–	–	–	–	1	1	1	–	1	–	–	–	–	–	–	–	–	–
Traumatic psychoses	–	–	–	–	–	–	–	–	–	–	1	1	1	–	1	–	–	–
With cerebral arteriosclerosis	–	–	–	–	–	–	–	–	–	–	1	1	2	3	5	8	17	25
With other disturbances of circulation	–	–	–	–	–	–	2	–	2	–	–	–	–	1	1	–	–	–
With convulsive disorders (epilepsy)	–	–	–	–	–	–	–	1	1	–	2	2	–	–	–	1	–	1
Senile psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Involutional psychoses	–	–	–	–	2	2	–	2	2	2	10	12	4	8	12	2	3	5
Due to other metabolic diseases, etc.	–	–	–	3	2	5	–	2	2	2	–	2	1	–	1	1	–	1
Due to new growth	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	–	–	–	1	–	1	–	1	1	2	–	2	2	2	4	2	1	3
Psychoneuroses	1	2	3	1	2	3	–	1	1	–	1	1	1	2	3	–	–	–
Manic-depressive psychoses	–	2	2	1	6	7	3	2	5	–	2	2	1	3	4	2	1	3
Dementia praecox	6	7	13	5	8	13	3	4	7	2	1	3	1	2	3	–	–	–
Paranoia and paranoid conditions	–	1	1	–	1	1	1	1	2	2	2	4	2	1	3	–	2	2
With psychopathic personality	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	–	–	–	2	1	3	–	–	–	–	–	–	1	–	1	–	–	–
Undiagnosed psychoses	–	–	–	–	2	2	1	–	1	–	4	4	1	2	3	–	1	1
Without psychoses	2	1	3	2	3	5	6	5	11	2	2	4	3	1	4	1	1	2
Total	13	16	29	26	29	55	24	20	44	18	32	50	34	30	64	28	26	54

TABLE 7. *Age of First Admissions Classified with Reference to Principal Psychoses* — Concluded

PSYCHOSES	60–64 years			65–69 years			70–74 years			75–79 years			80–84 years			85 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	2	–	2	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
With other forms of syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With epidemic encephalitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	2	2	4	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–
Due to drugs, etc.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Traumatic psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	17	19	36	26	27	53	21	36	57	17	29	46	13	15	28	8	10	18
With other disturbances of circulation	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With convulsive disorders (epilepsy)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Senile psychoses	–	3	3	–	2	2	–	5	5	1	–	1	–	2	2	1	2	3
Involutional psychoses	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Due to other metabolic diseases, etc.	2	2	4	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Due to new growth	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychoneuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manic-depressive psychoses	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dementia praecox	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Paranoia and paranoid conditions	1	2	3	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Undiagnosed psychoses	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Without psychoses	5	3	8	3	1	4	5	1	6	3	–	3	1	1	2	–	–	–
Total	33	35	68	33	33	66	26	43	69	21	29	50	14	18	32	9	12	21

TABLE 8. *Degree of Education of First Admissions Classified with Reference to Principal Psychoses*

Psychoses	TTotal			Illiterate			Reads Only			Reads and Writes			Common School			High School			College			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	1	1	2	–	–	–	1	–	1	8	3	11	6	–	6	1	–	1	1	–	1
With other forms of syphilis	2	1	3	–	–	–	–	–	–	–	–	–	2	1	3	–	–	–	–	–	–	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
With other infectious diseases	1	1	2	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1
Alcoholic psychoses	39	11	50	–	–	–	–	–	–	4	–	4	23	7	30	9	2	11	–	–	–	3	2	5
Due to drugs, etc.	1	1	2	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	–	–	–
Traumatic psychoses	1	1	2	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	112	157	269	11	16	27	–	2	2	11	16	27	50	65	115	7	14	21	4	4	8	29	40	69
With other disturbances of circulation	2	1	3	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–	–	1	1
With convulsive disorders (epilepsy)	1	6	7	–	–	–	–	–	–	–	1	1	1	3	4	–	1	1	–	–	–	–	1	1
Senile psychoses	3	14	17	1	1	2	–	–	–	–	1	1	–	7	7	–	2	2	–	–	–	2	3	5
Involutonal psychoses	10	26	36	1	3	4	–	–	–	–	2	2	5	12	17	3	6	9	–	–	–	1	3	4
Due to other metabolic diseases, etc.	10	7	17	1	–	1	–	–	–	1	–	1	7	1	8	–	2	2	–	1	1	1	3	4
Due to new growth	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	11	5	16	1	–	1	–	–	–	3	–	3	5	1	6	–	3	3	–	1	1	2	–	2
Psychoneuroses	3	9	12	–	–	–	–	–	–	–	–	–	2	6	8	1	2	3	–	–	–	–	1	1
Manic-depressive psychoses	8	27	35	–	1	1	–	–	–	1	–	1	3	16	19	3	9	12	–	–	–	1	1	2
Dementia praecox	40	48	88	–	–	–	–	–	–	1	4	5	25	20	45	9	21	30	4	1	5	1	2	3
Paranoia and paranoid conditions	6	11	17	–	–	–	–	–	–	2	–	2	2	6	8	1	3	4	1	–	1	–	2	2
With psychopathic personality	–	4	4	–	–	–	–	–	–	–	–	–	–	1	1	–	3	3	–	–	–	–	–	–
With mental deficiency	8	3	11	3	–	3	–	–	–	1	–	1	2	3	5	–	–	–	–	–	–	2	–	2
Undiagnosed psychoses	2	14	16	–	1	1	–	–	–	1	1	2	1	7	8	–	1	1	–	–	–	–	4	4
Without psychoses	48	25	73	1	3	4	–	–	–	2	1	3	32	11	43	4	3	7	4	–	4	5	7	12
Total	327	377	704	20	26	46	–	2	2	28	26	54	173	172	345	43	73	116	14	8	22	49	70	119

TABLE 9. *Environment of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			0–2,499			2,500–9,999			10,000–24,999			25,000–49,999			50,000–99,999			100,000–249,999			500,000+			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	18	4	22	–	–	–
With other forms of syphilis	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	1	3	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
With other infectious diseases	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–
Alcoholic psychoses	39	11	50	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	38	10	48	–	–	–
Due to drugs, etc.	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–
Traumatic psychoses	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–
With cerebral arteriosclerosis	112	157	269	–	–	–	–	2	2	–	1	1	9	3	12	1	2	3	1	3	4	101	146	247	–	–	–
With other disturbances of circulation	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	1	3	–	–	–
With convulsive disorders (epilepsy)	1	6	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	6	7	–	–	–
Senile psychoses	3	14	17	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	3	13	16	–	–	–
Involutional psychoses	10	26	36	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	3	3	10	22	32	–	–	–
Due to other metabolic diseases, etc.	10	7	17	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	2	2	9	5	14	–	–	–
Due to new growth	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	11	5	16	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–	9	5	14	–	–	–
Psychoneuroses	3	9	12	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1	–	–	–	3	7	10	–	–	–
Manic-depressive psychoses	8	27	35	–	–	–	–	1	1	–	–	–	–	1	1	–	–	–	–	1	1	8	24	32	–	–	–
Dementia praecox	40	48	88	–	1	1	–	1	1	1	1	2	1	2	3	–	–	–	–	–	–	38	43	81	–	–	–
Paranoia and paranoid conditions	6	11	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6	11	17	–	–	–
With psychopathic personality	–	4	4	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3	–	–	–
With mental deficiency	8	3	11	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	7	2	9	–	–	–
Undiagnosed psychoses	2	14	16	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1	2	12	14	–	–	–
Without psychoses	48	25	73	1	–	1	–	–	–	–	–	–	4	1	5	–	–	–	–	–	–	41	24	65	2	–	2
Total	327	377	704	1	1	2	1	6	7	1	3	4	19	8	27	1	5	6	1	11	12	301	343	644	2	–	2

TABLE 10. *Economic Condition of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			Dependent			Marginal			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	2	–	2	16	3	19	–	1	1
With other forms of syphilis	2	1	3	2	–	2	–	1	1	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	1	1	–	–	–
With other infectious diseases	1	1	2	–	–	–	1	–	1	–	1	1
Alcoholic psychoses	39	11	50	10	–	10	26	11	37	3	–	3
Due to drugs, etc.	1	1	2	–	–	–	1	1	2	–	–	–
Traumatic psychoses	1	1	2	–	–	–	1	1	2	–	–	–
With cerebral arteriosclerosis	112	157	269	31	39	70	58	93	151	23	25	48
With other disturbances of circulation	2	1	3	1	–	1	1	1	2	–	–	–
With convulsive disorders (epilepsy)	1	6	7	–	2	2	1	3	4	–	1	1
Senile psychoses	3	14	17	–	5	5	3	7	10	–	2	2
Involutional psychoses	10	26	36	2	1	3	8	22	30	–	3	3
Due to other metabolic diseases, etc.	10	7	17	1	1	2	9	4	13	–	2	2
Due to new growth	1	–	1	–	–	–	1	–	1	–	–	–
With organic changes of nervous system	11	5	16	2	–	2	8	5	13	1	–	1
Psychoneuroses	3	9	12	–	1	1	3	8	11	–	–	–
Manic-depressive psychoses	8	27	35	3	2	5	5	24	29	–	1	1
Dementia praecox	40	48	88	6	4	10	34	42	76	–	2	2
Paranoia and paranoid conditions	6	11	17	–	3	3	6	6	12	–	2	2
With psychopathic personality	–	4	4	–	–	–	–	4	4	–	–	–
With mental deficiency	8	3	11	7	2	9	1	1	2	–	–	–
Undiagnosed psychoses	2	14	16	–	2	2	2	9	11	–	3	3
Without psychoses	48	25	73	6	7	13	41	14	55	1	4	5
Total	327	377	704	73	69	142	226	261	487	28	47	75

TABLE 11. *Use of Alcohol by First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			Abstinent			Temperate			Intemperate			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	2	–	2	8	1	9	6	3	9	2	–	2
With other forms of syphilis	2	1	3	–	1	1	1	–	1	1	–	1	–	–	–
With epidemic encephalitis	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–
With other infectious diseases	1	1	2	–	1	1	–	–	–	–	–	–	1	–	1
Alcoholic psychoses	39	11	50	–	–	–	–	–	–	39	11	50	–	–	–
Due to drugs, etc.	1	1	2	–	1	1	–	–	–	1	–	1	–	–	–
Traumatic psychoses	1	1	2	–	–	–	–	1	1	1	–	1	–	–	–
With cerebral arteriosclerosis	112	157	269	24	84	108	40	25	65	20	11	31	28	37	65
With other disturbances of circulation	2	1	3	–	–	–	–	–	–	2	–	2	–	1	1
With convulsive disorders (epilepsy)	1	6	7	1	4	5	–	1	1	–	–	–	–	1	1
Senile psychoses	3	14	17	1	7	8	1	5	6	1	–	1	–	2	2
Involutional psychoses	10	26	36	2	19	21	6	3	9	1	1	2	1	3	4
Due to other metabolic diseases, etc.	10	7	17	2	2	4	2	2	4	5	1	6	1	2	3
Due to new growth	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	11	5	16	2	3	5	7	1	8	–	–	–	2	1	3
Psychoneuroses	3	9	12	–	5	5	2	–	2	1	1	2	–	3	3
Manic-depressive psychoses	8	27	35	3	12	15	2	12	14	2	1	3	1	2	3
Dementia praecox	40	48	88	20	28	48	9	14	23	11	2	13	–	4	4
Paranoia and paranoid conditions	6	11	17	1	7	8	3	3	6	2	–	2	–	1	1
With psychopathic personality	–	4	4	–	1	1	–	1	1	–	1	1	–	1	1
With mental deficiency	8	3	11	4	3	7	2	–	2	–	–	–	2	–	2
Undiagnosed psychoses	2	14	16	–	4	4	1	5	6	1	–	1	–	5	5
Without psychoses	48	25	73	14	10	24	9	4	13	21	7	28	4	4	8
Total	327	377	704	77	193	270	93	78	171	115	39	154	42	67	109

TABLE 12. *Marital Condition of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			Single			Married			Widowed			Divorced			Separated			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	18	4	22	6	–	6	10	4	14	–	–	–	1	–	1	1	–	1	–	–	–
With other forms of syphilis	2	1	3	1	–	1	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	1	1	2	–	1	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	39	11	50	17	3	20	19	3	22	–	5	5	1	–	1	1	–	1	1	–	1
Due to drugs, etc.	1	1	2	–	1	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Traumatic psychoses	1	1	2	–	1	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	112	157	269	14	40	54	41	33	74	52	81	133	5	3	8	–	–	–	–	–	–
With other disturbances of circulation	2	1	3	–	–	–	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–
With convulsive disorders (epilepsy)	1	6	7	–	3	3	1	2	3	–	1	1	–	–	–	–	–	–	–	–	–
Senile psychoses	3	14	17	–	3	3	2	3	5	1	6	7	–	–	–	–	1	1	–	1	1
Involutional psychoses	10	26	36	1	7	8	8	12	20	1	6	7	–	1	1	–	–	–	–	–	–
Due to other metabolic diseases, etc.	10	7	17	3	1	4	5	6	11	2	–	2	–	–	–	–	–	–	–	–	–
Due to new growth	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	11	5	16	5	1	6	5	3	8	–	1	1	1	–	1	–	–	–	–	–	–
Psychoneuroses	3	9	12	2	3	5	1	6	7	–	–	–	–	–	–	–	–	–	–	–	–
Manic-depressive psychoses	8	27	35	2	10	12	6	16	22	–	1	1	–	–	–	–	–	–	–	–	–
Dementia praecox	40	48	88	34	24	58	5	22	27	–	–	–	1	1	2	–	1	1	–	–	–
Paranoia and paranoid conditions	6	11	17	1	4	5	3	3	6	1	2	3	1	1	2	–	1	1	–	–	–
With psychopathic personality	–	4	4	–	2	2	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–
With mental deficiency	8	3	11	7	3	10	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Undiagnosed psychoses	2	14	16	1	3	4	1	8	9	–	3	3	–	–	–	–	–	–	–	–	–
Without psychoses	48	25	73	21	8	29	16	13	29	7	2	9	1	–	1	3	2	5	–	–	–
Total	327	377	704	115	118	233	129	137	266	64	108	172	12	8	20	5	5	10	2	1	3

TABLE 13. *Mental Disorders of All Admissions, All Discharges, All Deaths, 1939, All Cases in Residence and All Cases Out on September 30, 1939, by Status of Admission and Sex*

Mental Disorders	All Admissions						All Discharges						All Deaths						Resident Population						Patients Out on Visit, etc.					
	First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Psychoses Due to or Associated with Infection:																														
Syphilis of the Central Nervous System:																														
Meningo-encephalitic type (general paresis)	18	4	22	4	5	9	7	6	13	–	–	–	11	3	14	1	3	4	30	9	39	9	9	18	6	2	8	1	2	3
Meningo-vascular type (cerebral syphilis)	1	1	2	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	2	2	4	2	1	3	–	–	–	–	–	–
Other types	1	–	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
With epidemic encephalitis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	1	–	1
With other infectious disease	–	1	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	3	3	–	–	–	–	–	–	–	–	–
Post-infectious psychoses	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychoses Due to Intoxication:																														
Due to Alcohol:																														
Delirium tremens	3	–	3	4	–	4	3	–	3	3	–	3	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Korsakow's psychosis	13	6	19	3	–	3	13	8	21	1	1	2	4	–	4	–	–	–	16	11	27	7	1	8	2	2	4	–	–	–
Acute hallucinosis	7	3	10	4	2	6	6	4	10	5	1	6	1	–	1	–	–	–	14	–	14	2	1	3	3	–	3	2	1	3
Other types	16	2	18	9	1	10	16	5	21	9	1	10	2	3	5	3	1	4	41	11	52	27	3	30	8	1	9	5	–	5
Due to Drugs or Other Exogenous Poisons:																														
Due to opium and derivatives	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Due to other drugs	1	1	2	–	1	1	1	1	2	–	1	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Psychoses Due to Trauma:																														
Traumatic delirium	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Post-traumatic personality disorders	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
Post-traumatic mental deterioration	1	1	2	–	–	–	1	1	2	1	–	1	1	–	1	–	–	–	2	–	2	1	–	1	1	–	1	–	–	–
Other types	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychoses Due to Disturbance of Circulation:																														
With cerebral arteriosclerosis	112	157	269	19	21	40	78	80	158	13	8	21	64	82	146	7	9	16	111	134	245	21	29	50	14	21	35	2	3	5
With cerebral embolism	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
With cardio-renal disease	1	–	1	–	1	1	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Other types	–	1	1	–	–	–	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychoses Due to Convulsive Disorders (Epilepsy):																														
Epileptic deterioration	–	2	2	1	3	4	–	1	1	2	1	3	–	1	1	–	1	1	1	2	3	5	7	12	–	1	1	1	1	2
Epileptic clouded states	1	4	5	4	2	6	1	2	3	3	–	3	–	–	–	–	1	1	6	4	10	7	7	14	–	5	5	2	–	2
Other epileptic types	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–

Psychoses Due to Disturbances of Metabolism, Growth, Nutrition or Endocrine Function:																													
Senile Psychoses:																													
Simple deterioration	3	5	8	1	2	3	1	5	6	–	2	2	2	4	6	1	1	2	2	6	8	1	1	2	–	1	1	–	–	–
Presbyophrenic type	–	3	3	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	1	5	6	–	–	–	–	–	–	–	–	–
Depressed and agitated types	–	1	1	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	–	5	5	–	2	2	–	–	–	–	–	–
Paranoid types	–	5	5	–	–	–	1	3	4	1	–	1	–	–	–	–	–	–	3	13	16	–	1	1	–	–	–	–	–	–
Involutional psychoses:																													
Melancholia	6	13	19	2	6	8	3	6	9	1	4	5	–	4	4	–	2	2	8	21	29	3	12	15	4	3	7	–	5	5
Paranoid types	3	11	14	1	3	4	1	4	5	–	2	2	–	–	–	–	–	–	2	6	8	2	4	6	3	6	9	–	–	–
Other types	1	2	3	2	–	2	1	–	1	–	–	–	–	1	1	–	–	–	2	2	4	1	–	1	–	–	–	1	–	1
With diseases of the endocrine glands	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Exhaustion delirium	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–
Alzheimer's disease	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
With other somatic diseases	10	7	17	–	1	1	4	8	12	–	–	–	4	1	5	–	1	1	2	1	3	–	2	2	1	–	1	–	1	1
Psychoses Due to New Growth:																													
With intracranial neoplasms	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other neoplasms	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychoses Due to Unknown or Hereditary Causes, but Associated with Organic Changes:																													
With multiple sclerosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2	1	–	1	1	–	1	–	–	–
With Huntington's chorea	–	–	–	–	1	1	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–
With other brain or nervous diseases	11	5	16	4	1	5	8	3	11	2	–	2	4	4	8	1	–	1	12	8	20	7	3	10	4	2	6	1	–	1
Disorders of Psychogenic Origin or Without Clearly Defined Tangible Cause or Structural Change:																														f
Psychoneuroses:																														
Anxiety hysteria	–	1	1	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	–	–	–
Conversion hysteria: Mixed hysterical psychoneurosis	–	1	1	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	2	2	1	–	1	–	–	–	–	–	–
Psychasthenia or compulsive states:																														
Mixed compulsive states	–	–	–	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Neurasthenia	–	1	1	3	–	3	–	2	2	3	–	3	–	–	–	–	–	–	1	1	2	2	–	2	–	1	1	–	–	–
Reactive depression	2	3	5	–	–	–	2	3	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed psychoneurosis	1	3	4	–	1	1	–	2	2	–	–	–	–	–	–	–	–	–	1	1	2	–	1	1	1	–	1	–	1	1
Manic-depressive Psychoses:																														
Manic type	5	8	13	15	21	36	3	4	7	10	23	33	2	2	4	–	4	4	14	37	51	27	61	88	1	3	4	7	11	18
Depressive type	3	13	16	5	21	26	8	21	29	9	17	26	3	6	9	2	3	5	43	64	107	29	55	84	6	10	16	3	17	20
Circular type	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	1	1	2	–	–	–	–	–	–
Mixed type	–	4	4	3	3	6	–	5	5	–	5	5	–	–	–	–	–	–	4	9	13	9	3	12	–	2	2	1	2	3
Perplexed type	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	2	1	3	–	4	4	–	–	–	–	–	–
Stuporous type	–	–	–	–	1	1	–	2	2	2	4	6	–	–	–	–	–	–	3	23	26	3	9	12	2	–	2	–	2	2
Other types	–	2	2	1	3	4	1	4	5	5	2	7	–	–	–	–	–	–	2	8	10	1	6	7	–	2	2	–	2	2

TABLE 13. *Mental Disorders of All Admissions, All Discharges, All Deaths, 1939, All Cases in Residence and All Cases Out on September 30, 1939, by Status of Admission and Sex* — Concluded

Mental Disorders	All Admissions						All Discharges						All Deaths						Resident Population						Patients Out on Visit, etc.					
	First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions			First Admissions			Readmissions		
Dementia pracox (schizophrenia):																														
Simple type	7	1	8	4	–	4	5	1	6	5	1	6	–	–	–	–	–	–	20	7	27	16	10	26	2	–	2	1	–	1
Hebephrenic type	5	6	11	4	3	7	–	6	6	4	5	9	–	4	4	–	3	3	54	68	122	40	69	109	2	3	5	4	4	8
Catatonic type	9	6	15	7	4	11	4	4	8	4	3	7	1	4	5	–	1	1	30	33	63	32	33	65	10	4	14	6	1	7
Paranoid type	11	26	37	11	13	24	6	12	18	3	3	6	3	3	6	2	2	4	85	97	182	78	107	185	8	11	19	5	8	13
Other types	8	9	17	9	4	13	1	6	7	5	2	7	1	–	1	–	–	–	10	3	13	11	9	20	2	3	5	10	–	10
Paranoia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
Paranoid conditions	6	11	17	3	4	7	1	13	14	2	3	5	2	7	9	–	1	1	27	102	129	12	45	57	5	10	15	2	4	6
With psychopathic personality	–	4	4	–	3	3	1	3	4	1	4	5	–	–	–	1	–	1	–	3	3	5	9	14	–	2	2	–	2	2
With mental deficiency:																														
Idiot	–	–	–	1	–	1	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–
Imbecile	4	2	6	4	3	7	–	1	1	–	1	1	2	–	2	1	–	1	17	13	30	14	18	32	3	–	3	–	–	–
Moron	–	1	1	3	5	8	2	2	4	2	6	8	–	–	–	1	1	2	14	13	27	23	26	49	2	2	4	6	5	11
Unknown	4	–	4	1	1	2	–	–	–	–	1	1	–	–	–	–	–	–	3	4	7	3	7	10	2	–	2	–	–	–
Undiagnosed Psychoses	2	14	16	1	5	6	–	5	5	–	3	3	–	–	–	–	–	–	2	5	7	1	3	4	–	3	3	–	1	1
Without Psychoses																														
Alcoholism	7	4	11	5	5	10	6	4	10	6	6	12	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Drug addiction	–	–	–	–	2	2	1	–	1	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Disorders due to epidemic encephalitis	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psychopathic personality:																														
With asocial or amoral trends	9	–	9	12	1	13	10	–	10	10	1	11	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–
Mixed types	1	–	1	–	1	1	2	–	2	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Epilepsy	–	–	–	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mental deficiency:																														
Idiot	–	–	–	–	–	–	2	1	3	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Imbecile	1	3	4	2	1	3	1	3	4	2	1	3	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Moron	1	1	2	2	4	6	2	1	3	2	3	5	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Other non-psychotic diseases or conditions	11	5	16	4	–	4	9	4	13	4	–	4	1	–	1	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
No other condition	17	12	29	4	10	14	16	12	28	5	10	15	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–	–	–	–
Grand Total	327	377	704	164	170	334	234	265	499	127	128	255	110	138	248	20	34	54	600	742	1,342	413	567	980	93	102	195	61	73	134

Note:—Admissions and discharges do not include transfers.

TABLE 13–A. *Mental Disorders of Readmissions, 1939, by Sex*

MENTAL DISORDERS	READMISSIONS		
	M.	F.	T.
With syphilitic meningo-encephalitis	4	5	9
Alcoholic psychoses	20	3	23
Due to drugs, etc.	–	1	1
With cerebral arteriosclerosis	19	21	40
With other disturbances of circulation	–	1	1
With convulsive disorders (epilepsy)	5	5	10
Senile psychoses	1	2	3
Involutional psychoses	5	9	14
Due to other metabolic diseases, etc.	–	1	1
With organic changes of nervous system	4	2	6
Psychoneuroses	4	1	5
Manic-depressive psychoses	24	50	74
Dementia praecox	35	24	59
Paranoia and paranoid conditions	3	4	7
With psychopathic personality	–	3	3
With mental deficiency	9	9	18
Undiagnosed psychoses	1	5	6
Without psychoses	30	24	54
Total	164	170	334

TABLE 14. *Discharges of Patients Classified with Reference to Principal Psychoses and Condition on Discharge*

PSYCHOSES	TOTAL			Recovered			Improved			Unimproved		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	7	6	13	1	3	4	5	2	7	1	1	2
With other infectious diseases	1	–	1	–	–	–	1	–	1	–	–	–
Alcoholic psychoses	56	20	76	45	16	61	10	4	14	1	–	1
Due to drugs, etc.	1	2	3	1	2	3	–	–	–	–	–	–
Traumatic psychoses	3	1	4	–	1	1	3	–	3	–	–	–
With cerebral arteriosclerosis	91	88	179	30	18	48	40	42	82	21	28	49
With other disturbances of circulation	2	3	5	1	1	2	1	1	2	–	1	1
With convulsive disorders (epilepsy)	6	4	10	3	2	5	2	2	4	1	–	1
Senile psychoses	3	10	13	2	2	4	1	3	4	–	5	5
Involutional psychoses	6	16	22	2	4	6	3	8	11	1	4	5
Due to other metabolic diseases, etc.	4	9	13	1	3	4	1	3	4	2	3	5
Due to new growth	1	1	2	–	–	–	1	1	2	–	–	–
With organic changes of nervous system	10	3	13	3	1	4	5	–	5	2	2	4
Psychoneuroses	6	9	15	3	4	7	3	3	6	–	2	2
Manic-depressive psychoses	38	87	125	21	33	54	13	37	50	4	17	21
Dementia praecox	37	43	80	7	6	13	24	25	49	6	12	18
Paranoia and paranoid conditions	3	16	19	1	5	6	2	7	9	–	4	4
With psychopathic personality	2	7	9	2	3	5	–	3	3	–	1	1
With mental deficiency	4	11	15	2	7	9	2	3	5	–	1	1
Undiagnosed psychoses	–	8	8	–	–	–	–	1	1	–	7	7
Without psychoses	80	49	129	–	–	–	–	–	–	–	–	–
Total	361	393	754	125	111	236	117	145	262	39	88	127

TABLE 15. *Hospital Residence During This Admission of First Admissions Discharged During 1939*

PSYCHOSES	Number			Average Net Hospital Residence in Years		
	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	7	6	13	1.83	3.74	2.72
With other infectious diseases	1	–	1	.04	–	.04
Alcoholic psychoses	38	17	55	2.20	4.47	2.90
Due to drugs, etc.	1	1	2	.12	.20	.16
Traumatic psychoses	2	1	3	.74	.37	.62
With cerebral arteriosclerosis	78	80	158	.66	.48	.54
With other disturbances of circulation	2	3	5	.12	.52	.36
With convulsive disorders (epilepsy)	1	3	4	.12	.09	.10
Senile psychoses	2	8	10	3.93	1.28	1.81
Involutional psychoses	5	10	15	3.19	4.60	4.13
Due to other metabolic diseases, etc.	4	9	13	.10	.39	.30
Due to new growth	1	1	2	.04	.04	.04
With organic changes of nervous system	8	3	11	.47	.72	.54
Psychoneuroses	2	9	11	.04	.06	.06
Manic-depressive psychoses	12	36	48	1.57	2.62	2.36
Dementia praecox	16	29	45	.43	.97	.78
Paranoia and paranoid conditions	1	13	14	.71	1.44	1.38
With psychopathic personality	1	3	4	.46	7.88	6.03
With mental deficiency	2	3	5	.41	5.50	3.46
Undiagnosed psychoses	–	5	5	–	.04	.04
Without psychoses	50	25	75	.09	.07	.08
Total	234	265	499	.88	1.45	1.18

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Mental Disorders*

CAUSES OF DEATH	TOTAL			With syphilitic meningo-encephalitis			With other forms of syphilis			With other infectious diseases			Alcoholic psychoses			Traumatic psychoses			With cerebral arterio-sclerosis			With convulsive disorders (epilepsy)			Senile psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Infectious and Parasitic Diseases:																											
Erysipelas	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Tuberculosis of the respiratory system	13	4	17	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	1	2	3	–	–	–	1	–	1
Tuberculosis of other organs	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Disseminated tuberculosis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syphilis (non-nervous forms)	2	3	5	2	1	3	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Purulent infection, septicaemia (non-puerperal)	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other infectious diseases	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Cancer and Other Tumors:																											
Cancer and other malignant tumors	6	17	23	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–	3	8	11	–	–	–	–	–	–
Rheumatic Diseases, Nutritional Diseases, Diseases of the Endocrine Glands and Other General Diseases:																											
Diabetes	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Diseases of the Blood and Blood-Making Organs:																											
Pernicious anemia	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Diseases of the Nervous System and Organs of Special Sense:																											
Meningitis	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Cerebral hemorrhage	11	11	22	–	–	–	–	–	–	–	–	–	2	1	3	–	–	–	7	6	13	–	–	–	–	1	1
Cerebral embolism and thrombosis	1	5	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	4	5	–	–	–	–	–	–
General paralysis of the insane	5	3	8	5	3	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Circulatiory System:																											
Acute endocarditis	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Chronic endocarditis (valvular disease)	2	2	4	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	1	1	–	–	–	1	–	1
Diseases of the myocardium	–	7	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3	–	–	–	–	–	–
Diseases of the coronary arteries and angina pectoris	10	5	15	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1	5	2	7	–	–	–	–	–	–
Other diseases of the heart	48	65	113	1	–	1	–	–	–	–	–	–	1	1	2	–	–	–	39	42	81	–	–	–	–	7	7
Other diseases	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Respiratory System:																											
Bronchitis	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bronchopneumonia (including capillary bronchitis)	14	19	33	2	2	4	–	–	–	–	–	–	1	–	1	–	–	–	9	9	18	–	–	–	–	1	1
Lobar pneumonia	3	5	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	3	–	1	1	–	–	–
Pleurisy	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases (tuberculosis excepted)	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3	–	–	–	–	–	–
Diseases of the Digestive System:																											
Diarrhea and enteritis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hernia, intestinal obstruction	3	–	3	–	–	–	–	–	–	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–
Cirrhosis of the liver	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–

Biliary calculi and other diseases of the gall bladder and biliary passages	1	2	3	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Other diseases (cancer excepted)	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Genito-Urinary System:																											
Other diseases of the kidneys and ureters (puerperal diseases excepted)	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the bladder (tumors excepted)	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Other diseases not specified as venereal	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Violent and Accidental Deaths:																											
Suicide	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidental traumatism	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Other external causes	1	6	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	6	7	–	–	–	–	–	–
Ill-Defined Causes of Death	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Total	130	172	302	12	6	18	–	2	2	1	–	1	10	4	14	1	–	1	71	91	162	–	3	3	3	9	12

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Mental Disorders* — Concluded

CAUSES OF DEATH	Involutional psychoses			Due to other metabolic diseases, etc.			With organic changes of nervous system			Manic-depressive psychoses			Dementia praecox			Paranoia and paranoid conditions			With psychopathic personality			With mental deficiency			Without psychoses		
	M.	F.	T.	M.	F.	T	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Infectious and Parasitic Diseases:																											
Erysipelas	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tuberculosis of the respiratory system	–	–	–	3	–	3	–	–	–	1	1	2	3	1	4	–	–	–	–	–	–	2	–	2	–	–	–
Tuberculosis of other organs	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Disseminated tuberculosis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syphilis (non-nervous forms)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Purulent infection, septicaemia (non-puerperal)	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other infectious diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cancer and Other Tumors:																											
Cancer and other malignant tumors	–	–	–	–	–	–	–	–	–	–	3	3	1	3	4	–	2	2	1	–	1	–	–	–	–	–	–
Rheumatic Diseases, Nutritional Diseases, Diseases of the Endocrine Glands and Other General Diseases:																											
Diabetes	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Diseases of the Blood and Blood-Making Organs:																											
Pernicious anemia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Nervous System and Organs of Special Sense:																											
Meningitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Cerebral hemorrhage	–	–	–	–	–	–	1	1	2	–	1	1	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–
Cerebral embolism and thrombosis	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis of the insane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Circulatory System:																											
Acute endocarditis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chronic endocarditis (valvular disease)	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the myocardium	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–	–	–	–	–	–	–	–	2	2	–	–	–
Diseases of the coronary arteries and angina pectoris	–	–	–	–	–	–	–	–	–	2	–	2	–	1	1	1	1	2	–	–	–	1	–	1	–	–	–
Other diseases of the heart	–	2	2	1	1	2	1	2	3	2	3	5	1	5	6	–	2	2	–	–	–	1	–	1	1	–	1
Other diseases	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Respiratory System:																											
Bronchitis	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bronchopneumonia (including capillary bronchitis)	–	3	3	–	–	–	–	1	1	1	–	1	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–
Lobar pneumonia	–	–	–	–	–	–	–	–	–	–	2	2	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–
Pleurisy	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases (tuberculosis excepted)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Diseases of the Digestive System:																											
Diarrhea and enteritis	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hernia, intestinal obstruction	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cirrhosis of the liver	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Biliary calculi and other diseases of the gall bladder and biliary passages	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–
Other diseases (cancer excepted)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Genito-Urinary System:																									
Other diseases of the kidneys and ureters (puerperal diseases excepted)	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the bladder (tumors excepted)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases not specified as venereal	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Violent and Accidental Deaths:																									
Suicide	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidental traumatism	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other external causes	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ill-Defined Causes of Death	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	–	7	7	5	2	7	5	5	10	7	15	22	7	17	24	2	8	10	1	–	1	4	2	6	1	1	2

TABLE 17. *Age of Patients at Time of Death Classified with Reference to Principal Psychoses*

PSYCHOSES	TOTAL			0–14 years			15–19 years			20–24 years			25–29 years			30–34 years			35–39 years			40–44 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	12	6	18	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1
With other forms of syphilis	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	10	4	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Traumatic psychoses	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	71	91	162	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With convulsive disorders (epilepsy)	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	2	2
Senile psychoses	3	9	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Involutional psychoses	–	7	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Due to other metabolic diseases, etc.	5	2	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3	–	–	–
With organic changes of nervous system	5	5	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
Manic-depressive psychoses	7	15	22	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	2	2	1	–	1
Dementia praecox	7	17	24	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	1	1	2	–	2	2
Paranoia and paranoid conditions	2	8	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With psychopathic personality	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	4	2	6	–	–	–	1	–	1	1	–	1	–	1	1	–	–	–	–	–	–	–	–	–
Without psychoses	1	1	2	–	1	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Total	130	172	302	–	1	1	1	–	1	2	–	2	–	1	1	2	1	3	4	5	9	2	5	7

PSYCHOSES	45–49 years			50–54 years			55–59 years			60–64 years			65–69 years			70–74 years			75–79 years			80–84 years			85 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	–	1	1	3	–	3	1	1	2	4	2	6	1	–	1	2	1	3	–	–	–	–	–	–	–	–	–
With other forms of syphilis	–	1	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	–	–	–	–	–	–	1	1	2	4	–	4	1	3	4	2	–	2	1	–	1	–	–	–	–	–	–
Traumatic psychoses	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	–	–	–	–	1	1	3	6	9	13	10	23	12	11	23	16	19	35	10	16	26	14	17	31	3	11	14
With convulsive disorders (epilepsy)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Senile psychoses	–	–	–	–	–	–	1	–	1	–	–	–	–	1	1	–	4	4	1	2	3	1	2	3	–	–	–
Involutional psychoses	–	2	2	–	–	–	–	2	2	–	1	1	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–
Due to other metabolic diseases, etc.	1	–	1	–	–	–	2	–	2	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	2	–	2	1	–	1	1	1	2	–	1	1	–	–	–	–	2	2	–	1	1	–	–	–	–	–	–
Manic-depressive psychoses	–	4	4	1	–	1	–	4	4	–	2	2	2	2	4	–	1	1	1	–	1	1	–	1	–	–	–
Dementia praecox	–	1	1	2	1	3	–	2	2	2	2	4	1	6	7	–	1	1	–	1	1	–	–	–	–	–	–
Paranoia and paranoid conditions	–	–	–	–	–	–	–	5	5	–	2	2	–	–	–	–	–	–	2	1	3	–	–	–	–	–	–
With psychopathic personality	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
Without psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3	9	12	9	2	11	9	22	31	25	20	45	18	26	44	21	29	50	15	21	36	16	19	35	3	11	14

TABLE 18. *Total Duration of Hospital Life of Patients Dying in Hospital During All Admissions Classified According to Principal Psychoses*

PSYCHOSES	TOTAL			Less than 1 month			1–3 months			4–7 months			8–12 months			1–2 years			3–4 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	12	6	18	–	–	–	4	1	5	–	1	1	1	1	2	1	2	3	1	1	2
With other forms of syphilis	–	2	2	–	–	–	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–
With other infectious diseases	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	10	4	14	1	–	1	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–
Traumatic psychoses	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	71	91	162	17	23	40	14	8	22	10	11	21	7	8	15	11	18	29	8	6	14
With convulsive disorders (epilepsy)	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1
Senile psychoses	3	9	12	1	1	2	–	2	2	1	–	1	–	–	–	–	–	–	–	3	3
Involutional psychoses	–	7	7	–	–	–	–	2	2	–	–	–	–	1	1	–	2	2	–	–	–
Due to other metabolic diseases, etc.	5	2	7	1	2	3	3	–	3	–	–	–	1	–	1	–	–	–	–	–	–
With organic changes of nervous system	5	5	10	1	–	1	–	1	1	–	–	–	1	–	1	1	2	3	–	2	2
Manic-depressive psychoses	7	15	22	2	1	3	–	–	–	–	–	–	–	1	1	–	3	3	–	2	2
Dementia praecox	7	17	24	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2	1	–	1
Paranoia and paranoid conditions	2	8	10	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3	1	2	3
With psychopathic personality	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	4	2	6	–	–	–	–	–	–	–	–	–	1	–	1	2	–	2	–	–	–
Without psychoses	1	1	2	1	–	1	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Total	130	172	302	25	27	52	21	15	36	11	14	25	12	11	23	17	32	49	11	17	28

PSYCHOSES	5–6 years			7–8 years			9–10 years			11–12 years			13–14 years			15–19 years			20 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	1	–	1	1	–	1	–	–	–	2	–	2	–	–	–	1	–	1	–	–	–
With other forms of syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other infectious diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic psychoses	3	–	3	–	–	–	–	–	–	2	–	2	1	1	2	–	1	1	2	1	3
Traumatic psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
With cerebral arteriosclerosis	1	9	10	1	4	5	1	1	2	1	1	2	–	1	1	–	–	–	–	1	1
With convulsive disorders (epilepsy)	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Senile psychoses	1	1	2	–	–	–	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–
Involutional psychoses	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Due to other metabolic diseases, etc.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With organic changes of nervous system	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manic-depressive psychoses	1	–	1	1	1	2	–	2	2	–	3	3	2	–	2	–	2	2	1	–	1
Dementia praecox	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	4	5	3	13	16
Paranoia and paranoid conditions	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–	–	2	2	–	–	–
With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
With mental deficiency	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2	3
Without psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	8	10	18	4	7	11	2	5	7	5	5	10	3	2	5	3	10	13	8	17	25

TABLE 19. *Average Length of Hospital Residence During the Present Admission of First Admissions in Residence on September 30, 1939*

PSYCHOSES	Number			Average Net Hospital Residence in Years		
	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	30	9	39	5.51	6.38	5.71
With other forms of syphilis	3	2	5	2.79	15.00	7.67
With epidemic encephalitis	1	–	1	2.50	–	2.50
With other infectious diseases	–	3	3	–	4.16	4.16
Alcoholic psychoses	71	22	93	7.90	9.48	8.28
Due to drugs, etc.	1	–	1	3.50	–	3.50
Traumatic psychoses	3	–	3	3.14	–	3.14
With cerebral arteriosclerosis	111	134	245	2.69	2.42	2.54
With other disturbances of circulation	1	–	1	.44	–	.44
With convulsive disorders (epilepsy)	8	6	14	8.24	13.33	10.42
Senile psychoses	6	29	35	5.49	6.21	6.08
Involutional psychoses	12	29	41	3.29	4.27	3.98
Due to other metabolic diseases, etc.	2	1	3	1.97	3.50	2.72
With organic changes of nervous system	14	8	22	5.06	2.35	4.07
Psychoneuroses	3	4	7	6.50	3.23	4.63
Manic-depressive psychoses	68	144	212	7.21	8.21	7.89
Dementia praecox	199	208	407	13.85	15.38	14.63
Paranoia and paranoid conditions	28	103	131	7.70	9.69	9.26
With psychopathic personality	–	3	3	–	8.48	8.48
With mental deficiency	34	30	64	14.50	11.86	13.26
Undiagnosed psychoses	2	5	7	.44	.44	.44
Without psychoses	3	2	5	.44	.97	.65
Total	600	742	1,342	8.73	9.18	8.98

TABLE 19–A. *Average Length of Hospital Residence During the Present Admission of Readmissions in Residence on September 30, 1939*

PSYCHOSES	Number			Average Net Hospital Residence in Years		
	M.	F.	T.	M.	F.	T.
With syphilitic meningo-encephalitis	9	9	18	6.83	3.16	5.00
With other forms of syphilis	2	1	3	5.00	17.50	9.16
Alcoholic psychoses	37	5	42	9.01	6.50	8.71
Due to drugs, etc.	1	–	1	7.50	–	7.50
Traumatic psychoses	3	–	3	14.16	–	14.16
With cerebral arteriosclerosis	21	29	50	2.50	2.22	2.34
With other disturbances of circulation	–	1	1	–	.50	.50
With convulsive disorders (epilepsy)	12	14	36	10.50	7.64	8.96
Senile psychoses	1	4	5	.50	8.25	6.70
Involutional psychoses	6	16	22	2.16	8.25	6.59
Due to other metabolic diseases, etc.	2	4	6	4.50	10.00	8.16
With organic changes of nervous system	8	5	13	4.00	2.50	3.42
Psychoneuroses	3	1	4	2.16	.50	1.75
Manic-depressive psychoses	70	139	209	7.58	8.09	7.92
Dementia praecox	177	228	405	13.34	12.62	12.94
Paranoia and paranoid conditions	12	45	57	7.83	10.58	10.00
With psychopathic personality	5	9	14	6.90	12.27	10.35
With mental deficiency	41	52	93	9.06	6.69	7.73
Undiagnosed psychoses	1	3	4	.50	.50	.50
Without psychoses	2	2	4	.50	.50	.50
Total	413	567	980	9.89	9.54	9.69

TABLE 20. *Family Care Statistics for Year Ended September 30, 1939*

	Males	Females	Total
Remaining in Family Care September 30, 1938	–	2	2
Whole Number of Cases within the Year	–	2	2
Discharged from Family Care within the Year:	–	2	2
Discharged Outright from Family Care	–	2	2
Average Daily Number in Family Care During Year:	–	2	2
Private	–	2	2